

Mabbett & Associates, Inc. Environmental Consultants & Engineers

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January 6, 2010

Mr. Don Heller United States Environmental Protection Agency Region V 77 West Jackson Boulevard Chicago, IL 60604-3590

Re:

PCB Action Work Plan Amendment Bodycote Thermal Processing Inc., Melrose Park, IL ILD 005 071 808 Project No. 1998002.267

Dear Mr. Heller:

Mabbett and Associates, Inc. ("M&A") submits this request for modification of the Polychlorinated Bi-phenyl Work Plan (PCB Work Plan) for the Heat Treatment Building (HTB) located at the above referenced property on behalf of our client Bodycote Thermal Processing, Inc., ("Bodycote"). The PCB Work Plan was originally submitted to Region V U.S. Environmental Protection Agency (the Agency) on September 12, 2006.

Groundwater Monitoring Program

Semi-annual groundwater monitoring at key monitoring wells has been conducted in the HTB for the past four (4) years. As stated in the existing PCB Work Plan, groundwater monitoring is to be conducted until free product has been removed to the maximum extent practicable and residual PCB concentrations in groundwater meet the established GRO. According to the conditionally approved PCB Work Plan, M&A is required to sample twenty-two (22) groundwater monitoring wells.

Until the October 2009 monitoring event, the groundwater monitoring wells included in the semi-annual program consisted of MCA-2, MCA-5, M&A-104, M&A-105, M&A-106, M&A-110, M&A-111, M&A-112, M&A-113, M&A-114, M&A-115, M&A-117, M&A-120, M&A-121, M&A-124, M&A-126, M&A-130, M&A-131, M&A-133, M&A-301, and M&A-208. Due to a new furnace line installation in December 2008 groundwater monitoring well M&A-105 was closed in place.

Due to the nature and aerial extent of the contamination, M&A has collected an additional ten (10) to twelve (12) groundwater samples from various wells located in the HTB from time to

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time in order to confirm the representative Conceptual Site Model that includes limited migration of PCBs away from the NAPL source area. Figure L-1 depicts the groundwater monitoring wells sampled during our most recent extended sampling program in October 2008. Groundwater monitoring wells shown in red indicate that PCBs were detected at concentrations above the Illinois Environmental Protection Agency (IEPA) applicable GRO of 2.5 micrograms per liter (µg/L) whereas groundwater monitoring wells shown in green indicate that PCBs were not detected at concentrations above the applicable GRO.

Most of the wells in the semi-annual monitoring program have been below the GRO since the monitoring program was established in 2006. The semi-annual data collected in accordance with the PCB Work Plan demonstrate that concentrations of PCBs remain steady or are decreasing. Therefore, in our professional opinion twenty-two (22) wells are no longer needed to monitor the PCB plume and fewer wells can be used to track the concentration of PCBs in groundwater beneath the HTB. As seen in Figure L-2, the Currently Approved Groundwater Monitoring Program, only one groundwater monitoring well M&A-113 which currently serves as the DNAPL recovery well, currently exceeds the PCB GRO.

M&A thus proposes to remove groundwater monitoring wells MCA-2, M&A-105, M&A-106, M&A-115, M&A-117, M&A-120, M&A-130, M&A-131, M&A-133, and M&A-208 from the semi-annual groundwater monitoring program. The groundwater monitoring wells chosen to remain in the program are wells upgradient and downgradient of NAPL recovery wells M&A-113 and M&A-114, and wells where dissolved PCBs have been detected in prior monitoring events. Refer to the historical data presented on the attached Table 1 – Historical Groundwater Analytical Data Summary. As seen on Table 1, the groundwater monitoring well that continues to exceed the GRO of 2.5 μg/L for PCBs is the DNAPL recovery well, M&A-113.

M&A will monitor the distribution of PCBs in intermediate depth groundwater by sampling on a semi annual; basis intermediate depth wells M&A-110, M&A-111, M&A-113, M&A-121, M&A-122, and M&A-126 until residual PCB concentrations in intermediate groundwater meet the established GRO. See Table 2 below.

M&A will monitor the distribution of PCBs in shallow groundwater by sampling on a semi annual; basis shallow depth wells MCA-5, M&A-104, M&A-112, M&A-114, M&A-116, M&A-124, and M&A-301 until residual PCB concentrations in shallow groundwater meet the established GRO. See Table 2 below.

Well Identification	Current Groundwater Monitoring Wells	Proposed Groundwater Monitoring Wells
MCA-2 (S)	PCBs	
MCA-5 (S)	PCBs	PCBs
M&A-104 (S)	PCBs	PCBs
M&A-105 (S)	PCBs	_
M&A-106 (S)	PCBs	_
M&A-110 (I)	PCBs	PCBs

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Well Identification	Current Groundwater Monitoring Wells	Proposed Groundwater Monitoring Wells
M&A-111 (I)	PCBs	PCBs
M&A-112 (S)	PCBs	PCBs
M&A-113 (I)	PCBs	PCBs
M&A-114 (S)	PCBs	PCBs
M&A-115 (I)	PCBs	-
M&A-116 (S)	-	PCBs
M&A-117 (I)	PCBs	-
M&A-120 (I)	PCBs	_
M&A-121 (I)	PCBs	PCBs
M&A-122 (I)	PCBs	PCBs
M&A-124 (S)	PCBs	PCBs
M&A-126 (I)	PCBs	PCBs
M&A-130 (S)	PCBs	-
M&A-131 (I)	PCBs	-
M&A-133 (I)	PCBs	-
M&A-301 (S)	PCBs	PCBs
M&A-208 (S)	PCBs	_

NOTES:

TABLE 2: Current groundwater monitoring wells sampled during the semi-annual groundwater sampling event and proposed groundwater monitoring wells to be sampled during future semi-annual groundwater sampling events.

Groundwater samples will be collected and analyzed using the same methods as the existing program. Wells containing NAPL, such as groundwater monitoring wells M&A-113 and M&A-114, may not be sampled if an adequate volume of groundwater is not present in the well at the time of the semi-annual sampling event. M&A personnel utilize the EPA document Low Stress (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells, dated July 30, 1996. M&A will purge each well by using a variable speed peristaltic pump to control the rate of purging and limit the drawdown caused by this operation. Dedicated ³/₈-inch outer diameter polyethylene tubing installed in each of the wells will be utilized as the intake and discharge tubing for the pumps. Pharmaceutical-grade tubing will be utilized in the pump head and was connected to the intake and discharge tubing (by insertion) to prevent the introduction of air into the samples. M&A will purge groundwater until the following field parameters generally stabilize to within the ranges presented:

Field Parameter	Stabilization Criteria
Specific Conductivity	3% of range
Oxidation-Reduction Potential	10.0 millivolts (mV)
Dissolved Oxygen	10% of range
pН	0.10 Standard pH
_	Units

⁽I) = intermediate groundwater monitoring well

⁽S) = shallow groundwater monitoring well

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Temperature	0.2°C
Turbidity	10% of range
1 di Oldity	1070 01141150

Following an initial purge period, measurements for these field parameters will be collected and recorded approximately every 3 to 5 minutes. In general, when all field parameters have stabilized for three consecutive measurements, the purging process will be terminated and the well will be prepared for sampling.

The sampling methodology involves running the peristaltic pump so that groundwater samples can be collected through the dedicated tubing. The samples will be collected in laboratory-supplied glassware, stored in an iced cooler, and submitted under chain-of-custody procedures to an approved commercial analytical laboratory for PCBs using EPA Method 8082.

If you have any further questions, please write or call me or my associates James R. Greacen or Christopher L. Mabbett on 781-275-6050.

Very truly yours,

MABBETT & ASSOCIATES, INC.

BY

Paul D. Steinberg, P.E., LSP

Licensed Professional Engineer No. 062.057736

Expires 11/30/2011

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Enclosures:

- 1. Table 1 Historical Groundwater Analytical Data Summary
- 2. Figure L-1 Extended Groundwater Monitoring Program
- 3. Figure L-2 Currently Approved Groundwater Monitoring Program

cc:

Paula Stine, IEPA

Mr. Thomas Anderson, Bodycote

ANM, JRG, CLM (MF)

G	W Samples		Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
	CO Tier I GR		2.5	2.5	2.5	2.5	2.5	2.5	2.5
WELL	AQUIFER	DATE	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)
MW-6	Shallow	10/28/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
MW-10	Intermed	10/28/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
MCA-1	Shallow	10/28/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
IMCA-1	Shallow	4/7/2009 10/20/2009	BRL (<0.5) BRL (<0.5)	BRL (<0.5) BRL (<0.5)	BRL (<0.5) BRL (<0.5)				
		10/02/2002	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	` ` ` ` · · · · · · · · · · · · · · · ·	BRL (<0.5)	BRL (<0.5)
		10/23/2003	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)
		4/18/2006		BRL (<1.0)	<u> </u>	BRL (<1.0)		BRL (<1.0)	BRL (<1.0)
		10/19/2006	BRL (<0.5)		· · · · · · · · ·	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)
BAOR O	0111	5/02/2007	BRL (<0.5)	·····	`	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)
MCA-2	Shallow	10/17/2007	BRL (<0.5)		`	BRL (<0.5)	······································	BRL (<0.5)	BRL (<0.5)
		4/16/2008	BRL (<0.5)		· · · · · ·	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)
		10/23/2008	BRL (<0.5)		·········	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)
		4/07/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)
		10/20/2009	BRL (<0.5)	 	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
MCA-3	Shallow	4/07/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	`		BRL (<0.5)	BRL (<0.5)
MCA-4	Shallow	10/28/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/17/2006 ⁽²⁾	-	-	-	-	-	-	-
		5/15/2006	BRL (<0.4)	BRL (<0.4)	BRL (<0.4)				
		10/18/2006	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
MCA-5	Shallow	4/30/2007 (2)	-	-		-	-	-	-
		10/17/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
		10/22/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
		4/07/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
		10/20/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
M&A-101	Shallow	10/29/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	4.99	BRL (<0.5)	BRL (<0.5)
		4/17/2006	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)				
		10/19/2006	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
M&A-103	Shallow	4/30/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
		10/17/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
		4/16/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				
		10/23/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)				

TABLE 1
BODYCOTE THERMAL PROCESSING
HEAT TREATMENT BUILDING
SUMMARY OF GROUNDWATER POLYCHLORINATED BIPHENYL LABORATORY ANALYTICAL RESULTS

GV	V Samples		Aroclor 1016	Aroclor 1221	Arocior 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
TAC	O Tier I GR		2.5	2.5	2.5	2.5	2.5	2.5	2.5
WELL	AQUIFER	DATE	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)
		10/02/2002	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	1.6	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
İ		10/23/2003	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		4/17/2006	BRL (<1.0)						
		10/19/2006	BRL (<0.5)						
M&A-104	Shallow	4/30/2007	BRL (<0.5)						
		10/17/2007	BRL (<0.5)						
		4/16/2008	BRL (<0.5)						
		10/23/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	0.592	BRL (<0.5)	BRL (<0.5)
		12/17/2008	BRL (<0.5)						
		4/07/2009	BRL (<0.5)						
		10/21/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	0.716	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/02/2002	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		10/22/2003	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		4/19/2006	BRL (<1.0)						
M&A-105	Shallow	10/19/2006	BRL (<0.5)						
INGA-100	Stranow	5/2/2007 ⁽⁴⁾	•	-	-	-		-	-
		10/17/2007 ⁽⁴⁾	•	-	-	-	-	-	-
		4/16/2008 ⁽⁴⁾	,	-	-	-	-	-	-
		10/22/2008 ⁽⁴⁾	-	-	-	-	-	-	-
		5/15/2006	BRL (<0.4)						
		10/19/2006	BRL (<0.5)						
		5/01/2007	BRL (<0.5)						
M&A-106	Shallow	10/18/2007	BRL (<0.5)						
		4/16/2008	BRL (<0.5)						
		10/22/2008	BRL (<0.5)						
		4/07/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		4/17/2006 ⁽¹⁾	-	_	_	-	-	-	-
M&A-109	Deep	10/19/2006 ⁽¹⁾	-	_	-	-	-	-	
	ا مودو	5/2/2007 ⁽¹⁾	-	-	_	-	**		-
		10/17/2007 ⁽¹⁾	-	-	-	-	-	-	_
		10/22/2008 ⁽¹⁾	-		-	-	-	-	-
		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	12.2	BRL (<0.5)	BRL (<0.5)
		4/17/2006 ⁽¹⁾	-		-	-	-	-	-
		5/15/2006	BRL (<0.4)	BRL (<0.4)	BRL (<0.4)	5.92	BRL (<0.4)	BRL (<0.4)	BRL (<0.4)
		10/19/2006	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.31	BRL (<0.5)	BRL (<0.5)
M&A-110	Intermed	4/30/2007	BRL (<0.5)						
		10/17/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.11	BRL (<0.5)	BRL (<0.5)
		10/23/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	0.848		BRL (<0.5)
		4/07/2009	BRL (<0.5)		BRL (<0.5)				
	:	10/21/2009			BRL (<0.5)			BRL (<0.5)	***************************************

		W Samples		Aroclor 1016	Aroclor 1221	Aroclor 1232	Arocior 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
	WELL TAC	O Tier I GR	O DATE	2.5 (μg/L)	2.5 (μg/L)	2.5 (μg/L)	2.5 (μg/L)	2.5 (μg/L)	2.5 (μg/L)	2.5
***************************************	AACTT	AQUIFER							San Description of the section	(µg/L)
			10/02/2002	BRL (<25)	BRL (<50)	BRL (<25)	600	BRL (<25)	154	BRL (<25)
			10/23/2003			BRL (<0.5)	BRL (<0.5)	3.73	BRL (<0.5)	BRL (<0.5)
			5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
			4/18/2006		· · · · · ·	BRL (<1.0)	BRL (<1.0)	`	BRL (<1.0)	BRL (<1.0)
			10/19/2006		BRL (<0.5)		` `	· · · · · · · · · · · · · · · · · · ·	BRL (<0.5)	
A	/I&A-111	Intermed	4/30/2007		BRL (<0.5)		BRL (<0.5)	`	BRL (<0.5)	
			10/18/2007		BRL (<0.5)		` '	0.652	BRL (<0.5)	<u>`</u>
			4/16/2008		BRL (<0.5)		BRL (<0.5)	` '	BRL (<0.5)	BRL (<0.5)
			10/22/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.16	BRL (<0.5)	
			12/17/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
			4/07/2009		BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
			10/21/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	0.712	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
			10/02/2002	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	5,9	BRL (<0.5)	2.8	BRL (<0.5)
			10/23/2003	BRL (<1.0)	BRL (<2.0)	BRL (<1.0)	BRL (<1.0)	17.7	9.04	BRL (<1.0)
			5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	13.3	BRL (<0.5)	BRL (<0.5)
			4/18/2006	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)
			10/19/2006 ⁽²⁾	-	-	-	-	-	-	-
Λ.	/I&A-112	Shallow	5/01/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
			10/18/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.99	BRL (<0.5)	BRL (<0.5)
			4/16/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
			10/23/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.02	BRL (<0.5)	BRL (<0.5)
			4/07/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.39	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
			10/21/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.04	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
	Junio		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	15.8	BRL (<0.5)	BRL (<0.5)
			4/19/2006	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	16,3	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)
			10/19/2006	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.22	BRL (<0.5)	BRL (<0.5)
			5/01/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
N.	Л&А-113	Intermed	10/17/2007 ⁽²⁾	-		-	-		- 1	-
			10/23/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	5.28	BRL (<0.5)	BRL (<0.5)
			12/17/2008		BRL (<0.5)	BRL (<0.5)	` '	1.29	BRL (<0.5)	BRL (<0.5)
			4/07/2009		BRL (<0.5)	BRL (<0.5)	2.96	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
			10/21/2009		BRL (<0.5)		7474719474717474	CONTRACTOR AND ADAPT VALUE OF		BRL (<0.5)

	W Samples	0	Aroclor 1016 2.5	Aroclor 1221 2.5	Aroclor 1232 2.5	Aroclor 1242 2.5	Aroclor 1248 2.5	Aroclor 1254 2.5	Aroclor 1260 2,5
WELL	AQUIFER	DATE	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)
		10/02/2002	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	16.8	BRL (<0.5)	13.8	BRL (<0.5)
		4/17/2006 ⁽³⁾	-	- 1	-	-	-	-	-
		10/19/2006 ⁽³⁾	-	-	-	-	J	_	-
M&A-114	Shallow	5/2/2007 ⁽³⁾	-	-	-	-	-	_	-
		10/17/2007 ⁽³⁾	-	-	-	_	-	_	,
		10/22/2008 ⁽³⁾		-	-	-	-	-	-
		10/20/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/02/2002	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/23/2003	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/19/2006	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)
M&A-115	Intermed	10/19/2006	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
	,,,,,,,,,,,,	5/2/2007 ⁽¹⁾	-	-		-	-	-	-
		10/18/2007	` ,	BRL (<0.5)		BRL (<0.5)	, ,	BRL (<0.5)	BRL (<0.5)
		4/08/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/20/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/18/2006	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)
		5/15/2006	BRL (<0.4)	BRL (<0.4)	BRL (<0.4)	BRL (<0.4)	BRL (<0.4)	BRL (<0.4)	BRL (<0.4)
M&A-116	Shallow	10/18/2006	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		5/01/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/17/2007 ⁽²⁾	-	-	-			_	
		10/22/2008 ⁽²⁾		-	-	-	-	N.	-
		5/01/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
	•	10/17/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
M&A-117	Intermed	4/16/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/22/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/06/2009	BRL (<0.5)	BRL (<0.5)		BRL (<0.5)	· · · · · · · · · · · · · · · · · · ·	BRL (<0.5)	BRL (<0.5)
		10/20/2009		BRL (<0.5)	ATTENDED TO A STATE OF THE STAT	BRL (<0.5)		BRL (<0.5)	
M&A-118	Shallow	10/28/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)

	V Samples		Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
WELL	O Tier I GR AQUIFER	DATE	2.5 (μg/L)						
		5/18/2004	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)		BRL (<0.5)	30,00
		4/18/2006	BRL (<1.0)	BRL (<1.0)	`	<u> </u>		BRL (<1.0)	
M&A-119	Intermed	10/18/2006	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)
		4/30/2007	BRL (<0.5)	BRL (<0.5)	` ,	BRL (<0.5)			
		10/18/2007	BRL (<0.5)	—— <u>)</u>	· · · · ·	,		BRL (<0.5)	
		10/18/2006	BRL (<0.5)		BRL (<0.5)				
		5/01/2007	BRL (<0.5)						
		10/17/2007 ⁽²⁾	-		-	-	_	-	-
M&A-120	Intermed	10/22/2008 ⁽²⁾	F	-	-	-	-	-	-
		12/17/2008	BRL (<0.5)						
		4/06/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
	Intermed	5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		4/18/2006	BRL (<1.0)						
		10/18/2006	BRL (<0.5)						
		5/02/2007	BRL (<0.5)						
M&A-121		10/17/2007 ⁽²⁾	-	-	-	_	-	-	-
		10/22/2008 ⁽²⁾	-	-	-	_	-	-	-
		12/17/2008			` '		<u>-</u>	BRL (<0.5)	BRL (<0.5)
		4/07/2009	<u> </u>					BRL (<0.5)	BRL (<0.5)
		10/20/2009	BRL (<0.5)						
		5/18/2004	` '		BRL (<0.5)	BRL (<0.5)	`/	· · · ·	BRL (<0.5)
		4/19/2006	`	BRL (<1.0)		BRL (<1.0)		BRL (<1.0)	BRL (<1.0)
		10/18/2006		BRL (<0.5)	`	BRL (<0.5)			
750 4 400		5/02/2007		BRL (<0.5)	, ,	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)
M&A-122	Intermed	10/17/2007		BRL (<0.5)		BRL (<0.5)	~,~,		BRL (<0.5)
		4/16/2008		BRL (<0.5)				BRL (<0.5)	
		10/22/2008	, ,					BRL (<0.5)	
		4/09/2009			. /	` ,		(/	BRL (<0.5)
	<u> </u>	10/20/2009	BRL (<0.5)						

	W Samples		Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
WELL	O Tier I GR	O DATE	2.5	2.5	2.5	2.5	2.5	2.5	2.5
VV C L L	AQUIFER		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)
		5/15/2006	BRL (<0.4)		BRL (<0.4)	` '	BRL (<0.4)	` ,	BRL (<0.4)
		10/19/2006	BRL (<0.5)	1 /			BRL (<0.5)	, ,	BRL (<0.5)
		5/01/2007	BRL (<0.5)	` ′	BRL (<0.5)	_ ` /	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
M&A-124	Shallow	10/18/2007	BRL (<0.5)	<u> </u>	BRL (<0.5)	BRL (<0.5)	`	BRL (<0.5)	BRL (<0.5)
		4/16/2008	BRL (<0.5)	<u> </u>	BRL (<0.5)	BRL (<0.5)	``	BRL (<0.5)	BRL (<0.5)
		10/22/2008	BRL (<0.5)						
		4/07/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		4/18/2006	BRL (<1.0)						
		10/18/2006	BRL (<0.5)						
		4/30/2007	BRL (<0.5)						
M&A-126	Intermed	10/18/2007	BRL (<0.5)						
		4/16/2008	BRL (<0.5)						
		10/23/2008	BRL (<0.5)						
		4/07/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
M&A-127	Intermed	10/28/2008	BRL (<0.5)						
		4/16/2008	BRL (<0.5)						
M&A-130	Shallow	10/29/2008	BRL (<0.5)						
mart-100	. Oranow	4/09/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
		12/19/2006	BRL (<0.5)	BRL (<0,5)	BRL (<0.5)				
M&A-131	Intermed	10/29/2008	BRL (<0.5)						
max-101	Internica	4/09/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
		12/19/2006	BRL (<0.5)						
M&A-133	Intermed	10/28/2008	BRL (<0.5)						
14102W-122	intenned	4/07/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						

TABLE 1 BODYCOTE THERMAL PROCESSING HEAT TREATMENT BUILDING

SUMMARY OF GROUNDWATER POLYCHLORINATED BIPHENYL LABORATORY ANALYTICAL RESULTS

G	GW Samples			Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
	O Tier I GR		2.5	2.5	2.5	2,5	2.5	2.5	2.5
WELL	AQUIFER	DATE	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)
		4/19/2006	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)
	[10/18/2006	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		5/02/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
M&A-301	Shallow	10/17/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
1		4/16/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRŁ (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/22/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/09/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/20/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/18/2006	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/30/2007 ⁽²⁾	-	_	_	-	-	-	-
M&A-208	Intermed	10/17/2007 ⁽²⁾	-		-	-	-	_	-
		10/28/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/9/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/20/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)

Notes:

μg/L - micrograms per liter

PCBs analysis performed via EPA Method 8082 TACO - Tiered Approach Toward Corrective Action

TACO Tier I Standards based on the Illinois Environmental Protection Agency Title 35. Admin Code

742.505

Tier 1 Remediation Objectives for Class II Groundwater

Shading indicates compound exceeds established TACO Tier I standard.

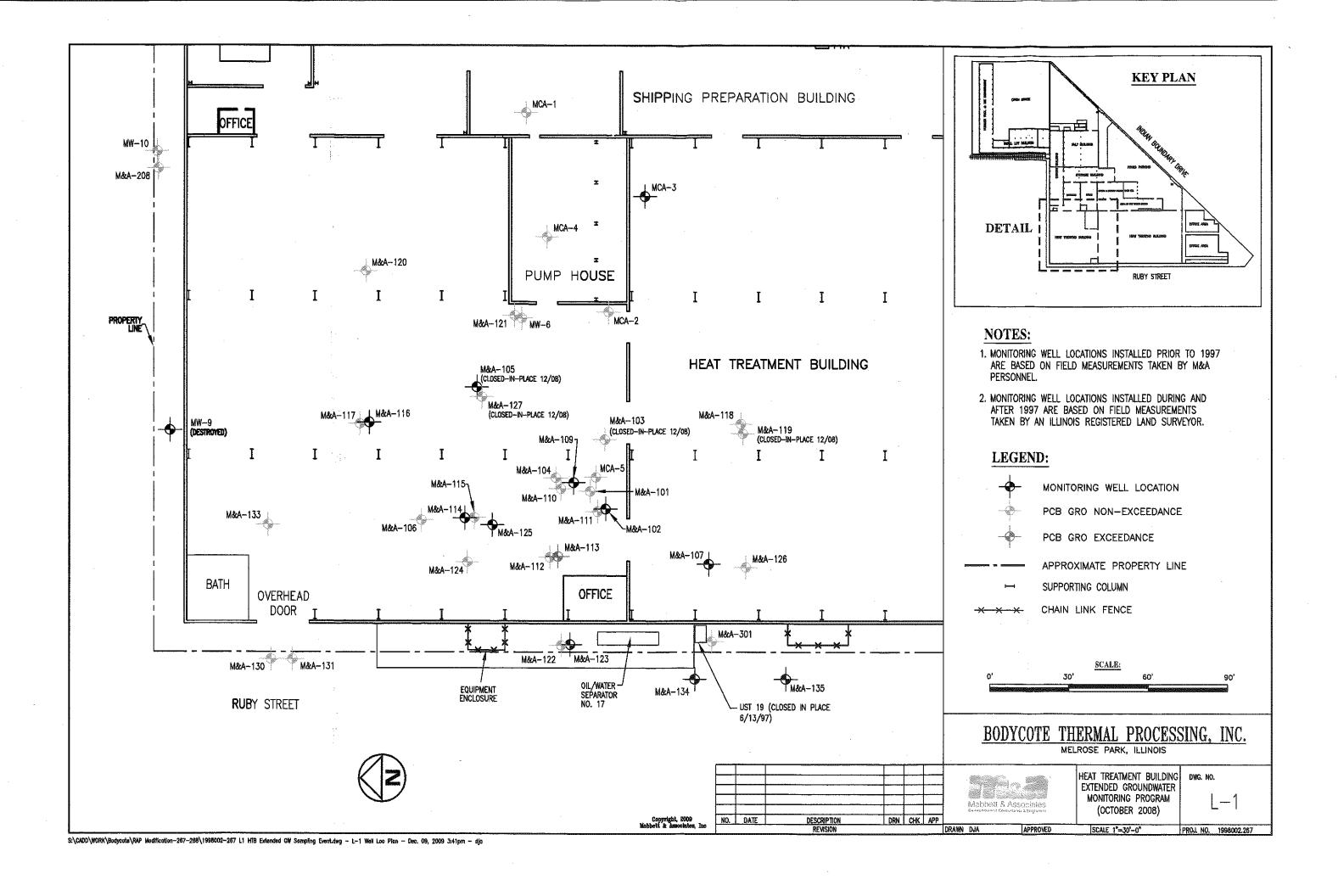
BOLD values indicate compound was detected

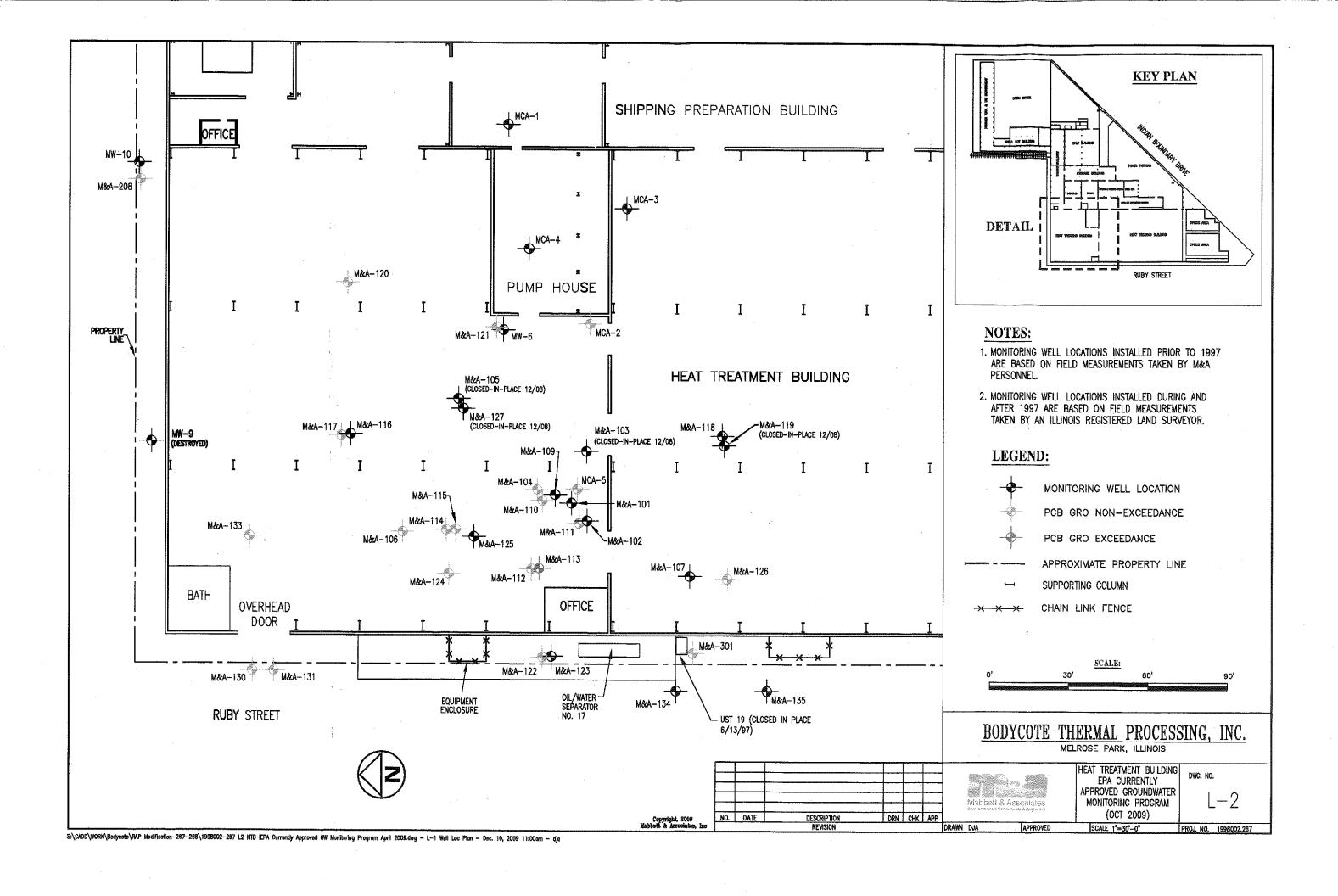
(1) Not sampled, well was dry.

(2) Not sampled, insufficient water recharge to complete sampling.

(3) Not sampled, well contained no water, only Free Product

(4) Not sampled, obstruction in well.







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August 27, 2009

Mr. Don Heller United States Environmental Protection Agency Region 5 77 West Jackson Boulevard Chicago, IL 60604-3590

Re: PCB Action Work Plan – Response to Question – July 15, 2009 US EPA Correspondence

Bodycote Thermal Processing Inc., Melrose Park, IL

ILD 005 071 808

Project No. 1998002.267

Dear Mr. Heller:

Mabbett and Associates, Inc. ("M&A"), on behalf of Bodycote Thermal Processing, Inc., ("Bodycote") is pleased to respond to the United States Environmental Protection Agency - Region 5's ("EPA" or "Agency") questions and comments received in a correspondence dated July 15, 2009, and in regard to M&A's PCB Action/Work Plan ("Work Plan") submitted to the Agency on September 12, 2006 for the above-captioned site.

By way of background, M&A's Work Plan constitutes a request for a "Risk-Based Disposal Approval" pursuant to 40 CFR §761.61(c). The following are M&A's responses to EPA's comments and questions raised in the Agency's correspondence received on July 15, 2009:

Comment 1: When monitoring wells M&A-113, M&A-114 and all other monitoring wells in this vicinity were installed, were soil samples from the borings analyzed for PCBs? Are there any existing soil analytical PCB data from previous investigations or closures (e.g., UST closure)? This includes the new monitoring wells to be installed inside and outside of the northwestern portion of the Heat Treating Building, as mentioned in your September 12, 2006 letter. If so, please provide the PCB analytical data.

Response 1: When groundwater monitoring wells M&A-113, M&A-114, and all other monitoring wells in this vicinity were installed, soil samples from the borings were not analyzed for PCBs. PCBs were not known to be present in the subsurface until, as stated in the *Work Plan*, "nine drums of recovered groundwater and DNAPL from M&A-113" were profiled for disposal in May 2000. It was discovered that PCBs were present in the liquid organic layer of eight of the nine drums. At that time, M&A began a subsurface investigation program consisting

Mr. Don Heller August 27, 2009 Page 2 of 5

of sampling the 20+ groundwater monitoring wells in the vicinity of groundwater monitoring wells M&A-113, M&A-114 in order to identify the aerial extent of PCB impacts.

There are no soil analytical PCB data from previous investigations or closures at the site. When groundwater monitoring wells M&A-130, M&A-131, and M&A-133 were installed inside and outside the northwestern portion of the Heat Treatment Building ("HTB"), soil samples were not collected from these locations based on the fact that there were no visual or olfactory indications that petroleum products were present in the soil borings. M&A collected groundwater samples from these locations and found that PCBs were not present above the laboratory method detection limit of 0.5µg/L.

Comment 2: Are there sumps, trenches, underground piping, or other conveyances for oily waste waters located up-gradient or down-gradient of the NAPL recovery area? Have residual liquids and sludges in these structures been sampled for PCBs? If not, such residual materials must be sampled for PCB analysis.

Response 2: An underground piping network is present in the vicinity of the NAPL recovery area. The underground piping network connects a sump pit located outside the eastern wall of the Pump House in the HTB to a condenser drain located in the Pump House which then runs to Oil/Water Separator No. 17, which is located outside the west wall of the HTB along Ruby Street. According to Bodycote personnel, the exact path of the underground piping is unknown. There are no "as-built" plans for subsurface piping in this area.

M&A personnel collected a residual oil sample from the sump pit located outside the eastern wall of the Pump House in the HTB and collected a residual sludge sample from the condenser drain located inside the Pump House and submitted it for PCB analysis on August 23, 2009, the results are currently pending. Refer to the Work Plan (attached).

Comment 3: Is Oil/Water Separator No. 17 still operational? If so, samples of both oil and water from this unit must be analyzed for PCBs. If such sampling has already been done, please submit the results.

Response 3: Oil/Water Separator No. 17 is currently in operation. Samples of oil and water from this unit have not been analyzed for the presence of PCBs according to Bodycote personnel. M&A personnel collected an oil sample and a water sample, and analyzed them for the presence of PCBs on August 23, 2009, the results are currently pending. Refer to the Work Plan Amendment (attached).

Comment 4: Drawing L-2 of the Work Plan shows a concrete slab that surrounds Oil/Water Separator No. 17 and much of the boulevard along Ruby Street, and which serves as an "engineered barrier." Why was this barrier installed? If this pavement covers contaminated soil, has the soil been sampled for PCBs?

Mr. Don Heller August 27, 2009 Page 3 of 5

Response 4: The Illinois Environmental Protection Agency ("IEPA") conditionally approved the Remedial Action Plans for the HTB in technical review letters dated December 28, 2000 and March 12, 2001. IEPA's approval of soil remedial objectives for volatile organic compounds ("VOCs") was contingent upon the maintenance of the building floor slab and the establishment of an engineered barrier at one location specified by the IEPA outside the HTB. This requirement addresses potential exposures to VOCs in soil beneath the building and a small area outside the west wall of the building. As established by the IEPA conditional approval letter, an engineered barrier was constructed in November 2002 outside the west wall of the HTB. Based on the drawing (Figure L-2 included in the Work Plan) and confirmatory field measurements this area encompasses approximately 1,100 square feet (ft²). Oil/Water Separator No. 17 referred to in the previous comment and a closed in place underground storage tank previously identified as UST No. 19 are located within the area of the engineered barrier.

The building slab and engineered barrier pavement covers soils impacted with VOCs. The soils have not been sampled for the presence of PCBs.

Comment 5: The Work Plan must include a written certification, signed by the property owner, that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site, are on file at the location designated in the certificate, and are available for EPA inspection (40 CFR \S 761.61(c) and .61(a)(3)(E)).

Response 5: The requested certification has been included in the Work Plan Amendment (attached).

Comment 6: The Work Plan must include an explanation of how removal of PCBs "to the maximum extent practicable" will be determined.

Response 6: Removal of PCBs "to the maximum extent practicable" will be determined based on the recovery rates at wells M&A-113 and M&A-114. Recovery of light non-aqueous phase liquid ("LNAPL") is currently taking place at M&A-114 and recovery of dense non-aqueous phase liquid ("DNAPL") is taking place at M&A-113. Once recoverable quantities of LNAPL and DNAPL no longer enter these wells, removal of PCBs to the maximum extent practicable will have been achieved.

Comment 7: The Federal cleanup standard for dissolved PCBs in waters is 0.5 μ g/L (40 CFR§761.79(b)(iii).

Response 7: We propose to use the IEPA Groundwater Remediation Objective ("GRO") for Class II groundwaters. According to the IEPA, the GRO for PCBs in areas where groundwater is classified as Class II (restricted use) is 2.5μg/L. Pursuant to Illinois Administrative Code 35 IAC 742.1000 (Subpart J) ("Institutional Controls"), institutional controls must be used when a subject property is determined to be industrial/commercial and when the point of human

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Mr. Don Heller August 27, 2009 Page 4 of 5

exposure is located at a place other than the source. The following ordinances have been adopted and were implemented as an environmental institutional control in the area of the site:

- Ordinance No. 321, An Ordinance Prohibiting the Use of Groundwater as a Potable Water Supply by the Installation or Use of Potable Water Supply Wells or by any Other Method, for the Village of Melrose Park, County of Cook, State of Illinois.
- Ordinance No. 509, An Ordinance Authorizing and Approving the Adoption of a Memorandum of Understanding Between the Village of Melrose Park and the Illinois Environmental Protection Agency in Connection with Establishing Institutional Controls for the Use of Ground Water as a Potable Water Supply in the Village of Melrose Park, County of Cook, State of Illinois.
- Memorandum of Understanding Between the Village of Melrose Park and the Illinois Environmental Protection Agency Regarding the Use of a Local Groundwater/Water Well Ordinance as an Environmental Institutional Control.

Certified copies of the above listed ordinances are included in Attachment A.

According to the Illinois State Water Survey performed on-line by M&A on April 21, 2009, there are no community water supply wells or other potable wells located within 2,500 feet of the subject site. There are no regulated recharge areas or wellhead protection areas located within 2,500 feet of the subject site. There is one private well identified on the water well supply survey located approximately 1,100 feet south of the subject site. The well belongs to the HIWAY Restaurant, was installed in 1957, is approximately 250 feet in depth, was drilled into bedrock, and is used for industrial/commercial activities. Please refer to Drawing L-5 for a graphical representation of the Illinois State Water Survey.

Comment 8: The Work Plan must include a specific groundwater monitoring program for verification that concentrations of dissolved PCBs at the Bodycote property line will not exceed $0.5 \,\mu/L$ after active remediation is concluded.

Response 8: Upon completion of removal of NAPL to the maximum extent practicable, M&A proposes to sample the perimeter groundwater monitoring wells (M&A-122, M&A-123, M&A-130, M&A-131, M&A-134, M&A-135, M&A-301, and M&A-302) on a biannual (*i.e.* twice-peryear) basis for the presence of PCBs. Sampling will continue until PCBs are not present at concentrations greater than 2.5 μ g/L, during four consecutive biannual sampling events. This proposed plan will be subject to follow-up review based on receipt of any new data and/or regulatory requirements.

Comment 9: The Work Plan will specify that Bodycote will file a restrictive covenant to the property deed which will ensure that the source of PCB contamination will be located and removed in the event that the overlying concrete floor of the Heat Treating Building is removed.

Mr. Don Heller August 27, 2009 Page 5 of 5

Response 9: On behalf of Bodycote, M&A prepared a draft deed restriction and included it Appendix E in the August 16, 2000 Remedial Action Plan submitted to the IEPA. M&A has added an amendment to this draft deed restriction and will record the deed restriction within 45 days of the receipt of No Further Remediation determination from the IEPA with the Office of the Recorder or Registrar of Titles for Cook County, State of Illinois, and the IEPA. Please see Attachment A attached for the draft deed restriction.

If you have any further questions, please write or call me or my associate James R. Greacen on 781-275-6050.

Very truly yours,

MABBETT & ASSOCIATES, INC.

BY

Paul D. Steinberg, P.E.

Senior Vice President and General Manager

/tw

Enclosures:

- 1. Amendment to September 12, 2006 PCB Action/Work Plan
- 2. Attachment A Proposed Land Use Restrictions and Conditions
- 3. Attachment B Ordinance 321

Ordinance 509

Memorandum between Melrose Park and IEPA

4. Exhibit L-1 – Engineered Barrier Site Plan

cc: ANM, JRG, CLM (MF)

AMENDMENT TO

SEPTEMBER 12, 2006 PCB ACTION/WORK PLAN

VIII. Future Explorations

M&A personnel will collect a residual oil sample from inside sump pit located outside the Pump House located in the HTB and will collect a residual sludge sample from the condenser drain located inside the Pump House. The sample will be collected in laboratory supplied glassware and transported in a cooled container under chain-of-custody documentation to TestAmerica in Nashville, TN, for analysis for PCBs via US EPA Method 8082. Analytical results will be reported to the US EPA Region 5 within 30 days of receipt of laboratory results.

M&A personnel will collect an oil sample and a water sample from Oil/Water Separator No. 17. The samples will be collected in laboratory supplied glassware and transported in a cooled container under chain-of-custody documentation to TestAmerica in Nashville, TN, for analysis for PCBs via US EPA Method 8082. Analytical results will be reported to the US EPA Region 5 within 30 days of receipt of laboratory results.

XI. Certification:

I, Thomas Anderson certify that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site, are on file at the 1975 North Ruby Street, Melrose Park, Illinois facility designated in the certificate, and are available for EPA inspection (40 CFR §761.61(c) and .61(a)(3)(E)).

Thomas Anderson

Bodycote Thermal Processing Inc.

Director of Safety, Health

& Environmental

The Americas

8/27/2009 Date

ATTACHMENT A

Proposed Land Use Restrictions and Conditions

INSTITUTIONAL CONTROL PROPOSED LAND USE RESTRICTIONS AND CONDITIONS HEAT TREATMENT BUILDING BODYCOTE THERMAL PROCESSING 1975 N RUBY ST MELROSE PARK, IL

Based on current findings, as described in the Site Investigation Report, Remedial Objectives Report, and Remedial Action Plan, land use restrictions and conditions have been developed for a portion of the Heat Treatment Building at the Bodycote Thermal Processing Inc. facility at 1975 North Ruby Street in Melrose Park, IL. The restrictions and conditions described herein will prevent risk to human health and the environment associated with potential future exposure(s) to residual concentrations of constituents in soil and groundwater at the designated portion of the facility. Current and future activities and uses that are permitted and those that are controlled within the portion of the facility are described. Such current commercial/industrial activities and uses are anticipated to continue at the portion of the Heat Treatment Building subject to the restrictions and conditions for the reasonably foreseeable future. The following restrictions and conditions are presented:

- 1. <u>Permitted Activities and Uses</u>. Residual constituent concentrations in soil and groundwater at a portion of the Heat Treatment Building pose no significant risk to human health and the environment provided that:
 - (i) Continued industrial/commercial land uses are permitted including, but not limited to, manufacturing and production operations, noninvasive uses such as material handling and loading, aboveground material storage, pedestrian and vehicular traffic, and vehicle parking.
 - (ii) Subsurface excavation or other invasive activities including construction, maintenance, and repair of utilities below the local ground surface shall be conducted under an appropriate site-specific Health and Safety Plan ("HASP") prepared pursuant to Occupational and Safety and Health Administration (OSHA) regulations and guidelines and a Soil Management Plan ("SMP") prepared pursuant to 35 Illinois Administrative Code (IAC) Part 742 and/or other relevant and appropriate regulations. The HASP and SMP must be developed and implemented under the supervision of an appropriately accredited environmental professional in accordance with 35 IAC Part 742 and other applicable federal, state, and/or local statutes and regulations. The HASP shall include provisions to minimize human contact with contaminated soil and groundwater. The SMP shall provide for soil and groundwater management resulting from construction, excavation, and dewatering activities. Copies of the HASP and SMP are not attached to this document as there are no current plans to conduct subsurface excavation or other invasive activities within the portion of the building subject to these conditions.
 - (iii) Such other activities or uses which, in the opinion of an appropriately accredited environmental professional, shall present no greater risk of harm to health, safety, public welfare, or the environment than the activities and uses set forth in this Paragraph.

- 2. <u>Restricted Activities</u>. Activities and uses which are inconsistent with the objectives of this Institutional Control, and which, if implemented at the portion(s) of the facility to which this Institutional Control applies, may result in a risk of harm to human health and/or the environment are as follows:
 - (i) Residential, children's school, playground, children's daycare, recreational, and/or other such activities and uses which could result in unacceptable exposures;
 - (ii) Gardening or other agricultural activities and uses which result in exposures to residual contamination through direct human contact with, ingestion of, and/or inhalation of contaminated soil, groundwater, agricultural produce, airborne dust, and/or related fugitive emissions;
 - (iii) Site re-construction activities that compromises and/or removes the engineered barrier that currently restricts access to the area of residual contamination <u>unless</u> efforts are included following construction to restore the engineered barrier;
 - (iv) Disturbance or removal of soil or groundwater existing below the engineered barrier <u>unless</u> such activity is conducted under an appropriate HASP and SMP as stipulated in Paragraph 1(ii);
 - (v) Extraction and use of on-site groundwater at the facility for any purpose including but not limited to potable water, process water, and irrigation; and
 - (vi) Other such activities and uses which, in the opinion of an appropriately accredited environmental professional, present a greater potential risk of harm to human health and/or the environment, other than those subject to the provisions of Paragraph 1.
- 3. <u>Conditions Set Forth</u>. The following conditions apply to prevent potential risk to human health and/or the environment:
 - (i) The concrete floor, within the portion of the facility subject to this Institutional Control shown in Exhibit A-1, is an engineered barrier that prevents contact with residual concentrations of contaminants in soil and groundwater and must be maintained or reestablished pursuant to Paragraph 2(iii);
 - (ii) No subsurface excavation or other invasive activities shall occur which could result in potential exposure to identified contaminated soil and groundwater <u>unless</u> appropriate HASP and SMP provisions are developed and implemented as outlined in Paragraph 1(ii);
 - (iii) At a minimum, SMP provisions must:
 - (a) Establish control measures which restrict access to the soil excavation area by unauthorized personnel not covered under the HASP and limit potential physical and/or chemical hazards during periods when an open soil excavation is left unattended by project personnel; and

- (b) Include excavated soil segregation, staging, stockpiling, transport, disposition, and/or on-site reuse (if appropriate) provisions which minimize inadvertent exposures to investigation and/or remediation-derived wastes through direct human contact with, ingestion of, and/or inhalation of contaminated soil, water, airborne dust, and/or related fugitive emissions by workers, visitors, abutters, and/or trespassers;
- (iv) In the event that the overlying concrete floor of the Heat Treatment Building is removed, the source of PCB contamination will be located and removed to the maximum extent practicable.

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ATTACHMENT B

Ordinance 321 Ordinance 509 Memorandum between Melrose Park and IEPA

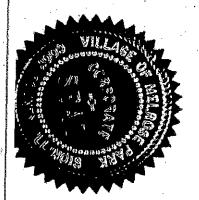
STATE OF ILLINOIS)	
* 1)	SS
COUNTY OF COOK)	

CERTIFICATION OF ORDINANCE #32.

I, Barbara Jasinski, the undersigned, do hereby certify that I am duly elected and qualified Village Clerk of the Village of Melrose Park, County of Cook, State of Illinois (the "Village"), and as such official I am the keeper of the records and files of the Village and of the President and Board of Trustees thereof (the "Village Board").

I do further certify that Ordinance #321was adopted by the President and Board of Trustees of the Village of Melrose Park at a public meeting of the Village Board held November 24, 1997, at the hour of 7:30 p.m., in the First Floor meeting Room of the Police Department, One North Broadway Avenue (Broadway & Main Street), Melrose Park, Illinois 60160.

IN WITNESS WHEREOF, I hereunto affix my official signature and the seal of the Village, this 15th day of June 2000.



Barbara Jasinski, Village Clerk

VILLAGE OF MELROSE PARK COOK COUNTY, ILLINOIS

ORDINANCE NO. 321

AN ORDINANCE PROHIBITING THE USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE INSTALLATION OR USE OF POTABLE WATER SUPPLY WELLS OR BY ANY OTHER METHOD, FOR THE VILLAGE OF MELROSE PARK, COUNTY OF COOK, STATE OF ILLINOIS.

ADOPTED BY THE
PRESIDENT AND BOARD OF TRUSTEES
OF THE
VILLAGE OF MELROSE PARK

THIS 24TH DAY OF NOVEMBER, 1997

RONALD M. SERPICO, Village President BARBARA JASINSKI, Village Clerk

Board Of Trustees

CARLOTTA "LOLLIE" ARIOLA
JOHN S. CONTEDUCA
CATHLEEN ITALIA
FRED LAMB
RUBEN LOMELI
JOSEPH McMILLAN

Published by authority of the President and Board of Trustees Of the Village of Melrose Park, Cook County, Illinois on This 24TH day of November, 1997.

ORDINANCE NO. 321

AN ORDINANCE PROHIBITING THE USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE INSTALLATION OR USE OF POTABLE WATER SUPPLY WELLS OR BY ANY OTHER METHOD, FOR THE VILLAGE OF MELROSE PARK, COUNTY OF COOK, STATE OF ILLINOIS.

Article I. In General, Sections 01-09

Section 01. Incorporation Clause.

Section 02. Purpose.

Section 03. Invocation of Authority.

Section 04. State Law Adopted.

Section 05-09. Reserved.

Article II. Ground Water As A Potable Water Supply.

Section 10. Use of Groundwater As a Potable Water Supply Prohibited.

Section 11. Exception(s).

Section 12. Penalties.

Section 13. Definitions.

Article III. Savings Clauses, Publication, Effective Date.

Section 14. Headings.

Section 15. Severability.

Section 16. Superseder.

Section 17. Publication.

Section 18. Effective Date.

ORDINANCE NO. 321

AN ORDINANCE PROHIBITING THE USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE INSTALLATION OR USE OF POTABLE WATER SUPPLY WELLS OR BY ANY OTHER METHOD, FOR THE VILLAGE OF MELROSE PARK, COUNTY OF COOK, STATE OF ILLINOIS.

WHEREAS, the Village of Melrose Park, Cook County, State of Illinois (the "Village") is a duly organized and existing Village created under the provisions of the laws of the State of Illinois, and is now operating under the provisions of the Illinois Municipal Code, and all laws amendatory thereof and supplementary thereto with full powers to enact ordinances for the benefit of the residents of the Village.

WHEREAS, The President and the Board of Trustees (the "Corporate Authorities") of the Village of Melrose Park, County of Cook, State of Illinois, have determined that it is advisable, necessary and in the best interest of the Village to prohibit the use of groundwater as a potable water supply by the installation or use of potable water supply wells or by any other method.

NOW THEREFORE, BE IT ORDAINED by the Village President and the Board of Trustees of the Village of Melrose Park, Cook County Illinois:

ARTICLE I. IN GENERAL

Section 01. Incorporation Clause.

The parties agree that the above information, contained in the preamble, is hereby incorporated into this ordinance by reference.

Section 02. Purpose.

The purpose of this ordinance is to prohibit the use of groundwater as a potable water supply by the installation or use of potable water supply wells or by any other method.

Section 03. Invocation of authority.

This ordinance is enacted pursuant to the authority granted to this Village by Constitution of the State of Illinois and the Illinois Compiled Statutes.

Section 04. State Law Adopted.

All applicable provisions of the Illinois Compiled Statutes, including the Illinois Municipal Code, as may be amended from time to time, relating to the purposes of this ordinance are hereby incorporated herein by reference.

Sections 05-09. Reserved.

ARTICLE II. GROUND WATER AS A POTABLE WATER SUPPLY

Section 10. Use of Groundwater as a Potable Water Supply Prohibited.

The use or attempt to use as a potable water supply groundwater from within the corporate limits of the Village of Melrose Park by the installation or drilling of wells or by any other method is hereby prohibited.

Section 11. Exception(s).

After a determination by the Village President, the Village of Melrose Park may use as a potable water supply groundwater from within the corporate limits of the Village of Melrose Park by the installation or drilling of wells or by any other method. This exception only applies for uses that are determined, by the Village President, to be in the best interest of the citizens of the Village of Melrose Park.

Section 12. Penalties.

Any person violating the provisions of this ordinance shall be subject to a fine of up to \$ 1,000.00, for each violation.

Section 13. Definitions.

"Person" is any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, or any other legal entity, or their legal representatives, agents or assigns.

"Potable water" is any water used for human or domestic consumption, including, but not limited to, water used for drinking, bathing, washing dishes, or preparing foods.

ARTICLE III. SAVINGS CLAUSES, PUBLICATION, EFFECTIVE DATE

Section 14. Headings.

The headings for the articles, sections, paragraphs and sub-paragraphs of this ordinance are inserted solely for the convenience of reference and form no substantive part of this ordinance nor should they be used in any interpretation or construction of any substantive provisions of this ordinance.

Section 15. Severability.

The provisions of this ordinance are hereby declared to be severable and should any provision, clause, sentence, paragraph, sub-paragraph, section, or part of this ordinance be determined to be in conflict with any law, statute or regulation by a court of competent jurisdiction, said provision shall be excluded and deemed inoperative,

unenforceable, and as though not provided for herein, and all other provisions shall remain unaffected, unimpaired, valid and in full force and effect. It is hereby declared to be the legislative intent of the Board of Trustees that this ordinance would have been adopted had not such unconstitutional or invalid provision, clause, sentence, paragraph, sub-paragraph, section, or part thereof had not been included.

Section 16. Superseder.

All code provisions, ordinances, resolutions and orders, or parts thereof, in conflict herewith, are to the extent of such conflict hereby superseded.

Section 17. Publication.

A full, true and complete copy of this ordinance shall be published in pamphlet form or in a newspaper published and of general circulation within the Village as provided by the Illinois Municipal Code, as amended.

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Section 18. Effective date

This ordinance shall be in full force and effect upon passage, approval and ten (10) days after the publication hereof, as provided by law.

On The Individual Poll And Voice Vote Of The Board Of Trustees:

AYE VOTES:

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NAY VOTES:

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ABSTAIN:

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ABSENT:

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SO PASSED, ADOPTED, APPROVED AND ENACTED IN AND AT THE VILLAGE OF MELROSE PARK, COUNTY OF COOK, STATE OF ILLINOIS, THIS 24th DAY OF NOVEMBER, 1997 A.D.

APPROVED:

RONALD M. SERPICO VILLAGE PRESIDENT

ATTEST:

BARBARA JASINSKI,

VILLAGE CLERK

Recorded & McMunia pal Records: November 24, 1997

Published it panifield form on November 25, 1997

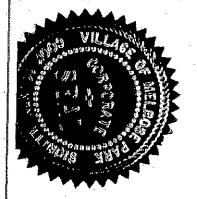
STATE OF ILLINOIS)	
)	SS
COUNTY OF COOK)	

CERTIFICATION OF ORDINANCE #509

I, Barbara Jasinski, the undersigned, do hereby certify that I am duly elected and qualified Village Clerk of the Village of Melrose Park, County of Cook, State of Illinois (the "Village"), and as such official I am the keeper of the records and files of the Village and of the President and Board of Trustees thereof (the "Village Board").

I do further certify that Ordinance #509 was adopted by the President and Board of Trustees of the Village of Melrose Park at a public meeting of the Village Board held April 24, 2000, at the hour of 7:30 p.m., in the First Floor meeting Room of the Police Department, One North Broadway Avenue (Broadway & Main Street), Melrose Park, Illinois 60160.

IN WITNESS WHEREOF, I hereunto affix my official signature and the seal of the Village, this 15th day of June 2000.



Subaru Jasensl Barbara Jasinski, Vijjage Clerk

VILLAGE OF MELROSE PARK COOK COUNTY, ILLINOIS

ORDINANCE NO. 509

AN ORDINANCE AUTHORIZING AND APPROVING THE ADOPTION OF A MEMORANDUM OF UNDERSTANDING BETWEEN THE VILLAGE OF MELROSE PARK AND THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY IN CONNECTION WITH ESTABLISHING INSTITUTIONAL CONTROLS FOR THE USE OF GROUND WATER AS A POTABLE WATER SUPPLY IN THE VILLAGE OF MELROSE PARK, COUNTY OF COOK, STATE OF ILLINOIS.

ADOPTED BY THE
PRESIDENT AND BOARD OF TRUSTEES
OF THE
VILLAGE OF MELROSE PARK

THIS 24TH DAY OF APRIL, 2000

RONALD M. SERPICO, Village President BARBARA JASINSKI, Village Clerk

Board Of Trustees

CARLOTTA "LOLLIE" ARIOLA
JOHN S. CONTEDUCA
CATHLEEN COSSIDENT ITALIA
THOMAS KLEIN
FRED LAMB
RUBEN LOMELI

Published by authority of the President and Board of Trustees Of the Village of Melrose Park, Cook County, Illinois on This 25th day of April, 2000.

ORDINANCE NO. 509

AN ORDINANCE AUTHORIZING AND APPROVING THE ADOPTION OF A MEMORANDUM OF UNDERSTANDING BETWEEN THE VILLAGE OF MELROSE PARK AND THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY IN CONNECTION WITH ESTABLISHING INSTITUTIONAL CONTROLS FOR THE USE OF GROUND WATER AS A POTABLE WATER SUPPLY IN THE VILLAGE OF MELROSE PARK, COUNTY OF COOK, STATE OF ILLINOIS.

WHEREAS, the Village of Melrose Park, Cook County, State of Illinois ("the Village") is a duly organized and existing Village created under the provisions of the laws of the State of Illinois, and is now operating under the provisions of the Illinois Municipal Code, and all laws amendatory thereof and supplementary thereto with full powers to enact ordinances for the benefit of the residents of the Village; and

WHEREAS, the Village President, the Honorable Ronald M. Serpico, the Village Clerk, the Honorable Barbara Jasinski, having taken office on May 1, 1997 and the Village Board of Trustees, the Honorable Carlotta "Lollie" Ariola, John S. Conteduca, Cathleen Cossident Italia, Fred Lamb, and Ruben Lomeli, having taken office on May 1, 1999, and Trustee Thomas Klein, having been appointed and sworn into office on March 27, 2000, respectively, constitute the duly elected, appointed, qualified and acting officials of the Village; and

WHEREAS, at the President and Board of Trustees Meeting of November 24, 1997, the Corporate Authorities of the Village of Melrose Park adopted Ordinance No. 321, entitled "An Ordinance Prohibiting the Use of Groundwater as a Potable Water Supply by the Installation or Use of Potable Water Supply Wells or by any other Method..."; and

WHEREAS, the effect of Ordinance No. 321 was to prohibit the use of groundwater as a potable water supply within the Village of Melrose Park, with the only exception being that the Village of Melrose Park may utilize groundwater as a potable water supply should certain emergency circumstances arise; and

WHEREAS, in order to ensure the long-term integrity of Ordinance No. 321 as an environmental institutional control and to minimize any risk to human health and the environment from contamination, the Village of Melrose Park desires to enter into a Memorandum of Understanding (hereinafter "MOU") with the Illinois Environmental Protection Agency (hereinafter "IEPA"); and

WHEREAS, pursuant to said MOU, the Village shall assume certain responsibilities, pursuant to 35 Ill.Adm. Code 742.1015(i), with respect to monitoring and siting public water supply wells, the specific responsibilities of the Village are more particularly described in said MOU, a copy of which is attached hereto as Exhibit A; and

WHEREAS, the President and the Board of Trustees (the "Corporate Authorities") of the Village of Melrose Park, County of Cook, State of Illinois, have determined that the adoption of the Memorandum of Understanding between the Village and the Illinois Environmental Protection Agency is necessary, advisable and in the best interest of the Village and its residents;

NOW THEREFORE, BE IT ORDAINED by the Village President and the Board of Trustees of the Village of Melrose Park, Cook County, Illinois:

ARTICLE I. IN GENERAL

Section 01. Incorporation Clause.

The President and Board of Trustees of the Village (the "Village Board") hereby find that all of the recitals hereinbefore stated as contained in the preambles to this Ordinance are full, true and correct and does hereby, by reference, incorporate and make them part of the Ordinance as legislative findings.

Section 02. Purpose.

The purpose of this Ordinance is to authorize and approve the adoption and execution of a Memorandum of Understanding between the Village and the Illinois Environmental Protection Agency, regarding the use of Ordinance No. 321 as an environmental institutional control.

Section 03. Invocation of authority.

This ordinance is enacted pursuant to the authority granted to this Village by Constitution of the State of Illinois and the Illinois Compiled Statutes.

Section 04. State Law Adopted.

All applicable provisions of the Illinois Compiled Statutes, including the Illinois Municipal Code, as may be amended from time to time, relating to the purposes of this ordinance are hereby incorporated herein by reference.

Sections 05-09. Reserved.

ARTICLE II. AUTHORIZATION OF MEMORANDUM OF UNDERSTANDING

Section 10.00 Approval & Adoption of Memorandum of Understanding.

That the terms and provisions of the Memorandum of Understanding between the Village and the Illinois Environmental Protection Agency, regarding the use of Ordinance No. 321 as an environmental institutional control, are hereby approved in substantially the same form as attached hereto as Exhibit A, with such insertions, omissions and changes as shall be approved by the Village President and the Village Attorney or other members of the governing body of the Village executing the same.

Section 11.00 Authorization for Execution of MOU.

The Village President is hereby authorized and directed to execute, and the Village Clerk, if necessary, is hereby authorized and directed to attest and countersign the Memorandum of Understanding and any related exhibits attached thereto, whether or not such documents are attached to this Ordinance, and the Village Clerk, if necessary, is also authorized to affix the seal of the Village to such documents.

Section 12.00 Other Actions Authorized.

The Village Clerk is hereby authorized and directed to prepare and certify the documents referenced in Section III of the MOU and the officers, employees and/or agents of the Village shall take all action necessary or reasonably required to carry out, give effect to and consummate the transactions contemplated by this Ordinance and to take all action necessary in conformity therewith, including, without limitation, the execution and delivery of any documents required to be delivered in connection with this Ordinance and the MOU.

ARTICLE III. SAVINGS CLAUSES, PUBLICATION, EFFECTIVE DATE

Section 13.00 Headings.

The headings for the articles, sections, paragraphs and sub-paragraphs of this Ordinance are inserted solely for the convenience of reference and form no substantive part of this Ordinance nor should they be used in any interpretation or construction of any substantive provisions of this Ordinance.

Section 14.00 Severability.

The provisions of this Ordinance are hereby declared to be severable and should any provision, clause, sentence, paragraph, sub-paragraph, section, or part of this Ordinance be determined to be in conflict with any law, statute or regulation by a court of competent jurisdiction, said provision shall be excluded and deemed inoperative, unenforceable, and as though not provided for herein, and all other provisions shall remain unaffected, unimpaired, valid and in full force and effect. It is hereby declared to be the legislative intent of the Board of Trustees that this Ordinance would have been adopted had not such unconstitutional or invalid provision, clause, sentence, paragraph, sub-paragraph, section, or part thereof had not been included.

Section 15.00 Superseder.

All code provisions, ordinances, resolutions and orders, or parts thereof, in conflict herewith, are to the extent of such conflict hereby superseded.

Section 16.00 Publication.

A full, true and complete copy of this Ordinance shall be published in pamphlet form or in a newspaper published and of general circulation within the Village as provided by the Illinois Municipal Code, as amended.

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Section 17.00 Effective date

This Ordinance shall be in full force and effect upon passage and approval, as provided by the Illinois Municipal Code, as amended.

On The Individual Poll And Voice Vote Of The Board Of Trustees:

AYE VOTES:

Trustee Ariola, Trustee Conteduca, Trustee Lamb,

Trustee Lomeli, Trustee Klein

NAY VOTES:

ABSTAIN:

ABSENT:

Trustee Italia

SO PASSED, ADOPTED, APPROVED AND ENACTED IN AND AT THE VILLAGE OF MELROSE PARK, COUNTY OF COOK, STATE OF ILLINOIS, THIS TWENTY-FOURTH DAY OF APRIL, 2000 A.D.

APPROVED:

RONALD M. SERPICO; VILLAGE PRESIDENT

ATTEST:

Barbara Jasinski/ Village Clerk

. IS CONTURE

Recorded in the Municipal Records: April 24, 2000

Published in pamphlet form: April 25, 2000

MEMORANDUM OF UNDERSTANDING BETWEEN THE VILLAGE OF MELROSE PARK AND THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY REGARDING THE USE OF A LOCAL GROUNDWATER/WATER WELL ORDINANCE AS AN ENVIRONMENTAL INSTITUTIONAL CONTROL

I. PURPOSE AND INTENT

- A. This Memorandum of Understanding (hereinafter "MOU") entered into by and between the Village of Melrose Park and the Illinois Environmental Protection Agency (hereinafter "Illinois EPA") is entered into for the purpose of satisfying the requirements of 35 Ill.Adm. Code 742.1015 for the use of groundwater or water well ordinances as environmental institutional controls. The Illinois EPA has reviewed the groundwater or water well ordinance of the Village of Melrose Park (a copy of which is attached hereto as "Exhibit A") and determined that the Ordinance prohibits the use of groundwater for potable purposes and the installation and use of new potable water supply wells by private entities but does not expressly prohibit those activities by the Village of Melrose Park itself. In such cases, 35 Ill.Adm. Code 742.1015(a) provides that the unit of local government may enter into an MOU with the Illinois EPA to allow the use of the Ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to specify the responsibilities that must be assumed by the Village of Melrose Park to satisfy the requirements for MOUs as set forth at 35 Ill.Adm. Code 742.1015(i).

II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY

In order to ensure the long-term integrity of the groundwater/water well ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the groundwater/water well ordinance is effectively managed; the Village of Melrose Park hereby assumes the following responsibilities pursuant to 35 Ill.Adm. Code 742.1015(i):

A. The Village of Melrose Park will notify the Illinois EPA Bureau of Land of any proposed ordinance changes, in connection with its well ordinance or this MOU, and notify the Illinois EPA Bureau of Land of any requests for variance that would impact or otherwise affect the intent of the Village's well ordinance and/or this MOU, at least thirty (30) days prior to the date the Village of Melrose Park is scheduled to take action on the proposed change or request (35 Ill.Adm. Code 742.1015(i)(4));

- B. The Village of Melrose Park will maintain a registry of all sites within its Corporate Limits that have received "No Further Remediation" determinations from the Illinois EPA (35 Ill.Adm. Code 742.1015(i)(5)). In an effort to assist the Village of Melrose Park with maintaining said registry, the Illinois EPA shall forward to the Village of Melrose Park copies of any and all Illinois EPA letters, communications, or the like in which a "No Further Remediation" determination has been made by the Illinois EPA with respect to any real estate within the Corporate Limits of the Village of Melrose Park.
- C. The Village of Melrose Park will review the registry of sites established under paragraph II. B prior to siting public potable water supply wells within the Corporate Limits of the Village of Melrose Park (35 Ill.Adm. Code 742.1015(i)(6)(A));
- D. Prior to siting public potable water supply wells and/or using potable water from any such well, the Village of Melrose Park will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II.B. and C (35 Ill.Adm. Code 742.1015(i)(6)(B)); and
- E. The Village of Melrose Park will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 III.Adm. Code 742.1015(i)(6)(C)).

NOTE: Notification under paragraphs II A and II B above or other communications concerning this MOU should be directed to:

If to the Illinois EPA:

Manager, Division of Remediation Management Bureau of Land Illinois Environmental Protection Agency P.O. Box 19276 Springfield, Illinois 62794-9276

If to the Village of Melrose Park:

Village Attorney
Village of Melrose Park
1000 N. 25th Avenue
Melrose Park, Illinois 60160

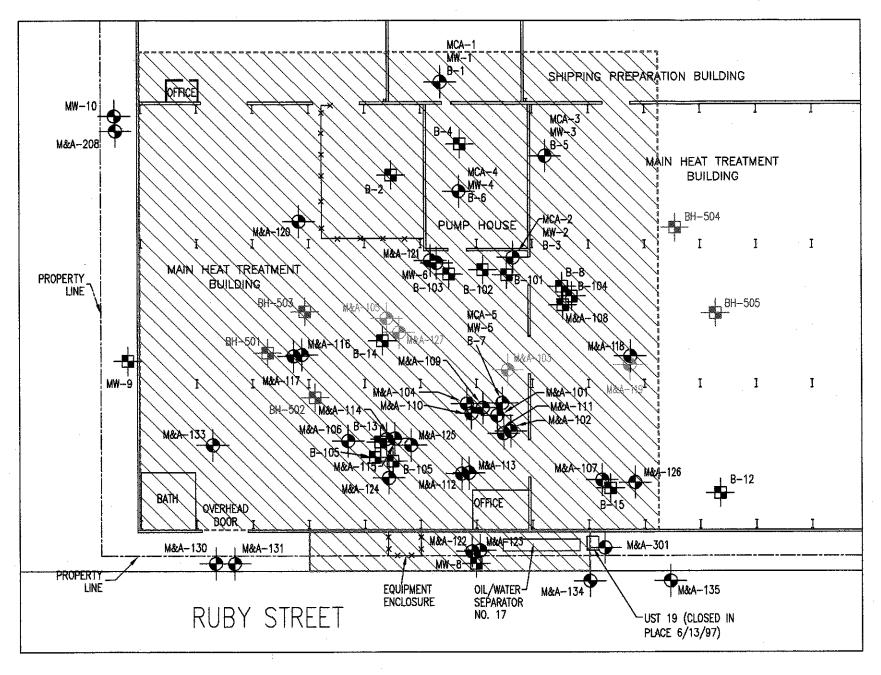
III. SUPPORTING DOCUMENTATION

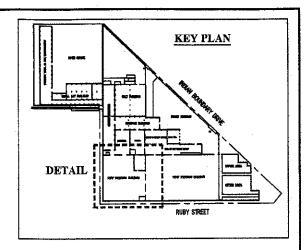
The following documentation is required by 35 Ill.Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of Village of Melrose Park Ordinance No. 321, entitled "An Ordinance Prohibiting the Use of Groundwater as a Potable Water Supply by the Installation or Use of Potable Water Supply Wells or by any Other Method, for the Village of Melrose Park, County of Cook, State of Illinois." A certificate of the Village Clerk is attached thereto certifying that said Ordinance, at the time of the adoption of this MOU, is a valid legislative enactment and is in full force and effect in the Village of Melrose Park. (35 Ill.Adm. Code 742.1015(i)(3));
- B. Attachment B: Certificate of the Village Clerk certifying that said Ordinance No. 321 is applicable everywhere within the Corporate Limits of the Village of Melrose Park (35 Ill.Adm. Code 742.1015(i)(2));
- C. Attachment C: A Certified Copy of Village of Melrose Park Ordinance No. _____, entitled "An Ordinance Authorizing and Approving the Adoption of a Memorandum of Understanding between the Village of Melrose Park and the Illinois Environmental Protection Agency In Connection with Establishing Institutional Controls for the Use of Ground Water as a Potable Water Supply in the Village of Melrose Park, County of Cook, State of Illinois."

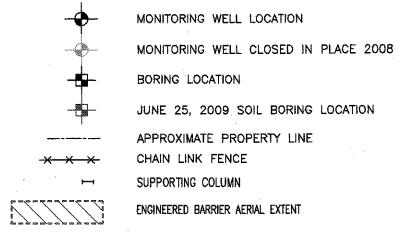
IN WITNESS WHEREOF, the lawful representatives of the parties hereto have caused this MOU to be signed, in counterpart, as follows:

FOR:	THE VILLAGE OF MELROSE PARK BY: Ronald M. Serpico Village President	DATE:	2000
FOR:	ILLINOIS ENVIRONMENTAL PROTEC BY: (Name and title of signatory)	TION AGENCY: DATE:	2000





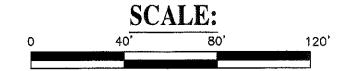
LEGEND:





PROJECT NO.

1998002.267



NOTES:

- 1. MONITORING WELL AND BORING LOCATIONS INSTALLED PRIOR TO 1997 ARE BASED ON FIELD MEASUREMENTS TAKEN BY M&A PERSONNEL.
- 2. MONITORING WELL AND BORING LOCATIONS INSTALLED DURING AND AFTER 1997 ARE BASED ON FIELD MEASUREMENTS TAKEN BY AN ILLINOIS REGISTERED LAND SURVEYOR.

BODYCOTE THERMAL PROCESSING, INC. MELROSE PARK, ILLINOIS	ENGINEERED SITE P	_ , , , , , , , , ,
	SCALE: 1"=40'-0"	DR BY: DJA
Mabbett & Associates Environmental Conduitants & Engineers	DATE: 8/25/09	AP BY: PDS

Copyright, 2009 Mabbett & Associates, Inc



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

<u>CERTIFIED MAIL</u>: 7001 0320 0006 0192 6173 <u>RETURNED RECEIPT REQUESTED</u>

July 15, 2009

Paul D. Steinberg, P.E., LSP Mabbett & Associates, Inc. 5 Alfred Circle Bedford, Massachusetts 01730-2346

RE: PCB Action Work Plan
Bodycote Thermal Processing, Melrose Park, IL
ILD 005 071 808

Dear Mr. Steinberg:

We are continuing our review of the September 12, 2006, *Polychlorinated Biphenyl Action/Work Plan*, for Bodycote Thermal Processing in Melrose Park, Illinois. Your cover letter indicates that that the plan is submitted pursuant to 40 CFR §761.61. U.S. EPA believes that this request falls under a risk-based disposal action request under 40 CFR §761.61(c) and will review it as such. Please let us know if this is not your intent.

The following questions and comments must be addressed before we can further review this risk-based disposal work plan:

- When monitoring wells M&A-113, M&A-114 and all other monitoring wells in this vicinity were installed, were soil samples from the borings analyzed for PCBs? Are there any existing soil analytical PCB data from previous investigations or closures (e.g., UST closure)? This includes the new monitoring wells to be installed inside and outside of the northwestern portion of the Heat Treating Building, as mentioned in your September 14, 2006 letter. If so, please provide the PCB analytical data.
- Are there sumps, trenches, underground piping, or other conveyances for oily waste waters located upgradient or downgradient of the NAPL recovery area? Have residual liquids and sludges in these structures been sampled fro PCBs? If not, such residual materials must be sampled for PCB analysis.

- Is Oil/Water Separator No.17 still operational? If so, samples of both oil and water from this unit must be analyzed for PCBs. If such sampling has already been done, please submit the results.
- Drawing L-2 of the *Work Plan* shows a concrete slab that surrounds Oil/Water Separator No. 17 and much of the boulevard along Ruby Street, and which serves as an "engineered barrier". Why was this barrier installed? If this pavement covers contaminated soil, has the soil been sampled for PCBs?
- The Work Plan must include a written certification, signed by the property owner, that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site, are on file at the location designated in the certificate, and are available for EPA inspection (40 CFR §761.61(c) and .61(a)(3)(E)).
- The Work Plan must include an explanation of how removal of PCBs "to the maximum extent practicable" will be determined.
- The Federal cleanup standard for dissolved in waters is 0.5 ug/L (40 CFR §761.79(b)(iii).
- The Work Plan must include a specific ground water monitoring program for verification that concentrations of dissolved PCBs at the Bodycote property line will not exceed 0.5 ug/L after active remediation is concluded.
- The Work Plan will specify that Bodycote will file a restrictive covenant to the property deed which will ensure that the source of PCB contamination will be located and removed in the event that the overlying concrete floor of the Heat Treating Building is removed.

Revisions to the *Polychlorinated Biphenyl Action/Work Plan* are to be submitted to this address within 45 days of receipt of this letter.

Please contact me at (312) 353-1248 or by e-mail at Heller.Donald@epa.gov if you have questions.

Sincerely,

Donald a Heller

Donald A. Heller, Corrective Action Project Manager Corrective Action Section 1 Remediation and Reuse Branch

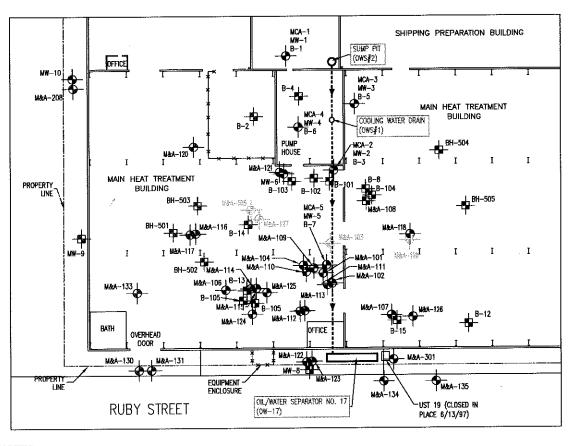
SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits. 1. Article Addressed to: Paul D. Steinberg, PE	A. Received by (Please Print Clearly) B. Date of Delivery C. Signature X
Makbett and Associates, Inc. 5 Alfred circle Bedford, MA 01730-2346	3. Service Type □ Certified Mail □ Express Mail □ Registered □ Return Receipt for Merchandise □ Insured Mail □ C.O.D. 4. Restricted Delivery? (Extra Fee) □ Yes
2. Article Number 7001 (Transfer from service label)	0350 0000 0145 6143
PS Form 3811, March 2001 Domestic F	Neturn Receipt 102595-01-M-1424

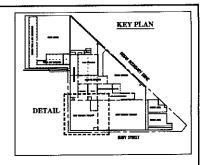
:	U.S. Postal : CERTIFIEI (Domestic Mail C	D MAIL REC	EIPT Coverage Provided)
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П	Postage	s 44	1000-00
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	Return Receipt Fee (Endorsement Required)		Helfe C
0006	Restricted Delivery Fee (Endorsement Required)		
	Total Postage & Fees	\$ 554	<u> </u>
0320	Street Ant No.	/Mubbett + A	rac (Heller 20-9)
1007	or PO Box No. S	Alfred Circle	
70	Bedford		- 2346
į	PS Form 3800, January 20	0	See Reverse for Instructions
2			

PCB SAMPLING OF OILY WASTE WATERS

BODYCOTE THERMAL PROCESSING

AUGUST 2009





LEGEND:

MONITORING WELL LOCATION

MONITORING WELL CLOSED IN PLACE 2008

BORING LOCATION

(OWS#2) PCB SAMPLE LOCATION

APPROXIMATE PROPERTY LINE

★ ★ CHAIN LINK FENCE
SUPPORTING COLUMN

SUBSURFACE DRAINAGE PIPE WITH FLOW ARROW



SCALE: 0 40 80 120

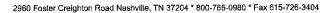
NOTES:

- MONITORING WELL AND BORING LOCATIONS INSTALLED PRIOR TO 1997 ARE BASED ON FIELD MEASUREMENTS TAKEN BY M&A PERSONNEL.
- 2. MONITORING WELL AND BORING LOCATIONS INSTALLED DURING AND AFTER 1997 ARE BASED ON FIELD MEASUREMENTS TAKEN BY AN ILLINOIS REGISTERED LAND SURVEYOR.

BODYCOTE THERMAL PROCESSING, INC. MELROSE PARK, BLINORS	PCB SAM LOCATIONS	
The Control of the Co	SCALE: 1"=40'-0"	DR BY: DJA
Mabbett & Associates	DATE: 8/25/09	AP BY: PDS



2\CX80\8008\Bodycota\1868002.283\1968002-267-PCB-SWP\MC LOC ANG_08.dag - Model - Sep. 08, 2008 | 11:37am - Sja





September 03, 2009

3:24:51PM

Client:

Mabbett & Associates, Inc. (10615)

5 Alfred Circle

Bedford, MA 01730

Attn:

Christopher Mabbett

Work Order:

NSH1683

Project Name:

Date Received:

Bodycote 1998002.266

Project Nbr:

1998002.266

P/O Nbr:

08/19/09

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
OWS-1	NSH1683-01	08/18/09 15:30
OWS-2	NSH1683-02	08/18/09 15:00
OW-17	NSH1683-03	08/18/09 13:15
OW-17	NSH1683-04	08/18/09 13:00

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Illinois Certification Number: 002179

RELEASED

9/21/20 – 2020-003646 TJW per CLM

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

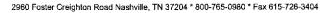
This report has been electronically signed.

Em & Haye

Report Approved By:

Ken A. Hayes

Senior Project Manager



N\$H1683



Client Mabbett & Associates, Inc. (10615)

5 Alfred Circle

Attn

Bedford, MA 01730 Christopher Mabbett Work Order:

Project Name:

Bodycote 1998002.266

Project Number:

1998002.266

Received:

08/19/09 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NSH1683-01 (OWS-1 -	Soil) Sample	ed: 08/18/0	9 15:30					
General Chemistry Parameters								
% Dry Solids	50.6		%	0.500	1	09/03/09 10:53	SW-846	9090355
Polychlorinated Biphenyls by EPA Metl	hod 8082							
PCB-1016	ND	RL1	mg/kg dry	3.28	50	08/28/09 08:27	SW846 8082	9083268
PCB-1221	ND	RL1	mg/kg dry	3.28	50	08/28/09 08:27	SW846 8082	9083268
PCB-1232	ND	RL1	mg/kg dry	3.28	50	08/28/09 08:27	SW846 8082	9083268
PCB-1242	ND	RL1	mg/kg dry	3.28	50	08/28/09 08:27	SW846 8082	9083268
PCB-1248	ND	RL1	mg/kg dry	3.28	50	08/28/09 08:27	SW846 8082	9083268
PCB-1254	ND	RL1	mg/kg dry	3.28	50	08/28/09 08:27	SW846 8082	9083268
PCB-1260	ND	RL1	mg/kg dry	3.28	50	08/28/09 08:27	SW846 8082	9083268
Surr: Tetrachloro-meta-xylene (19-147%)	100 %					08/28/09 08:27	SW846 8082	9083268
Surr: Decachlorobiphenyl (20-150%)	100 %					08/28/09 08:27	SW846 8082	9083268
Sample ID: NSH1683-02 (OWS-2 -	Oil) Sample	d: 08/18/0	9 15:00					
Polychlorinated Biphenyls in Oil by EP.	A Method 808	2						
PCB-1016	ND		mg/kg	0.0330	1	08/27/09 15:16	SW846 8082	9083263
PCB-1221	ND		mg/kg	0.0330	1	08/27/09 15:16	SW846 8082	9083263
PCB-1232	ND		mg/kg	0.0330	1	08/27/09 15:16	SW846 8082	9083263
PCB-1242	ND		mg/kg	0.0330	1	08/27/09 15:16	SW846 8082	9083263
PCB-1248	ND		mg/kg	0.0330	1	08/27/09 15:16	SW846 8082	9083263
PCB-1254	ND		mg/kg	0.0330	1	08/27/09 15:16	SW846 8082	9083263
PCB-1260	ND		mg/kg	0.0330	1	08/27/09 15:16	SW846 8082	9083263
Surr: Tetrachloro-meta-xylene (19-147%)	52 %					08/27/09 15:16	SW846 8082	9083263
Surr: Decachlorobiphenyl (20-150%)	60 %					08/27/09 15:16	SW846 8082	9083263
Sample ID: NSH1683-03 (OW-17 -	Water) Sam	pled: 08/1	8/09 13:15					
Polychlorinated Biphenyls by EPA Met	hod 8082						•	
PCB-1016	ND		ug/L	0.500	1	08/25/09 00:24	SW846 8082	9083289
PCB-1221	ND .		ug/L	0.500	1	08/25/09 00:24	SW846 8082	9083289
PCB-1232	ND		ug/L	0.500	1	08/25/09 00:24	SW846 8082	9083289
PCB-1242	ND		ug/L	0.500	1	08/25/09 00:24	SW846 8082	9083289
PCB-1248	ND		ug/L	0.500	1	08/25/09 00:24	SW846 8082	9083289
PCB-1254	ND		ug/L	0.500	1	08/25/09 00:24	SW846 8082	9083289
PCB-1260	ND		ug/L	0,500	1	08/25/09 00:24	SW846 8082	9083289
Surr: Tetrachloro-meta-xylene (17-142%)	68 %					08/25/09 00:24	SW846 8082	908328
Surr: Decachlorobiphenyl (10-149%)	73 %					08/25/09 00:24	SW846 8082	908328
Sample ID: NSH1683-04 (OW-17 -	Oil) Sample	d: 08/18/0	9 13:00					
Polychlorinated Biphenyls in Oil by EP	A Method 808	32						
PCB-1016	ND		mg/kg	0.653	20	08/28/09 08:47	SW846 8082	9083263
PCB-1221	ND		mg/kg	0.653	20	08/28/09 08:47	SW846 8082	9083263
PCB-1232	ND		mg/kg	0.653	20	08/28/09 08:47	SW846 8082	9083263
	ND		mg/kg	0.653	20	08/28/09 08:47	SW846 8082	90831
PCB-1242	ND		mg/kg	0.033	20	00/20/07 00.77	3 11 0 TO 0002	2002



THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client Mabbett & Associates, Inc. (10615)

5 Alfred Circle

Bedford, MA 01730

Christopher Mabbett

Attn

Work Order:

NSH1683

Project Name:

Bodycote 1998002.266

Project Number:

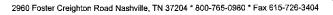
1998002.266

Received:

08/19/09 08:10

ANALYTICAL REPORT

A			T T 14	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Analyte	Result	Flag	Units	WIKL	Factor	Date/Time	Memou	Daten
Sample ID: NSH1683-04 (OW-17 - 0	Dil) - cont. Sa	mpled: 08	3/18/09 13:00					
Polychlorinated Biphenyls in Oil by EPA	Method 8082	- cont.						
PCB-1254	ND		mg/kg	0.653	20	08/28/09 08:47	SW846 8082	9083263
PCB-1260	ND		mg/kg	0.653	20	08/28/09 08:47	SW846 8082	9083263
Surr: Tetrachloro-meta-xylene (19-147%)	80 %					08/28/09 08:47	SW846 8082	9083263
Surr: Decachlorobiphenyl (20-150%)	160 %	ZX				08/28/09 08:47	SW846 8082	9083263





Client Mabbett & Associates, Inc. (10615)

5 Alfred Circle Bedford, MA 01730

Christopher Mabbett

Attn

Work Order:

NSH1683

Project Name:

Bodycote 1998002.266

Project Number:

1998002.266

Received: 08/19/09 08:10

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Polychlorinated Biphenyls by l	EPA Method 8082						
SW846 8082	9083268	NSH1683-01	30.14	10.00	08/22/09 09:40	AJF	EPA 3550B
SW846 8082	9083268	NSH1683-01RE1	30,14	10.00	08/22/09 09:40	АЉ	EPA 3550B
SW846 8082	9083289	NSH1683-03	500,00	2.00	08/21/09 09:05	MAH	EPA 3510C
Polychlorinated Biphenyls in C	Oil by EPA Method 8082						
SW846 8082	9083263	NSH1683-02	1.01	10,00	08/24/09 13:40	CXB	EPA 3580A
SW846 8082	9083263	NSH1683-04	1.02	10,00	08/24/09 13:40	CXB	EPA 3580A
SW846 8082	9083263	NSH1683-04RE1	1.02	10.00	08/24/09 13:40	CXB	EPA 3580A





THE LEADER IN ENVIRONMENTAL TESTING

Mabbett & Associates, Inc. (10615) Client

5 Alfred Circle

Attn

Bedford, MA 01730 Christopher Mabbett

Work Order:

NSH1683

Project Name:

Bodycote 1998002.266

Project Number:

1998002.266

Received:

08/19/09 08:10

PROJECT QUALITY CONTROL DATA Blank

Polychlorinated Biphenyls by EPA Method 8082 POSS2688-BLK1								
PCB-1016	Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time	
PCB-1016	Polychlorinated Biphenyls by EPA	Method 8082						
PCB-1221	9083268-BLK1							
PCB-1232	PCB-1016	< 0.0190		mg/kg wet	9083268	9083268-BLK1	08/24/09 14:38	
PCB-1242	PCB-1221	< 0.0110		mg/kg wet	9083268	9083268-BLK1	08/24/09 14:38	
PCB-1248	PCB-1232	< 0.0200		mg/kg wet	9083268	9083268-BLK1	08/24/09 14:38	
PCB-1254	PCB-1242	< 0.0140		mg/kg wet	9083268	9083268-BLK1	08/24/09 14:38	
PCB-1260	PCB-1248	< 0.0110		mg/kg wet	9083268	9083268-BLK1	08/24/09 14:38	
Surrogate: Tetrachloro-meta-xylene 66% 9083268 9083268-BLK1 08/24/09 14/38	PCB-1254	< 0.0190		mg/kg wet	9083268	9083268-BLK1	08/24/09 14:38	
Surrogate: Decachlorohiphenyl 84% 9083268 9083268-BLK1 08/24/09 14:38 9083289-BLK1 08/24/09 14:38 PCB-1016 <0.200 ug/L 9083289 9083289-BLK1 08/24/09 22:35 PCB-1221 <0.200 ug/L 9083289 9083289-BLK1 08/24/09 22:35 PCB-1242 <0.200 ug/L 9083289 9083289-BLK1 08/24/09 22:35 PCB-1248 <0.200 ug/L 9083289 9083289-BLK1 08/24/09 22:35 PCB-1254 <0.200 ug/L 9083289 9083289-BLK1 08/24/09 22:35 PCB-1260 <0.200 ug/L 9083289 9083289-BLK1 08/24/09 22:35 PCB-1260 <0.200 ug/L 9083289 9083289-BLK1 08/24/09 22:35 PCB-128 <0.200 ug/L 9083289 9083289-BLK1 08/24/09 22:35 PCB-128 <0.010	PCB-1260	< 0.0140		mg/kg wet	9083268	9083268-BLK1	08/24/09 14:38	
9083289-BLK1 PCB-1016	Surrogate: Tetrachloro-meta-xylene	66%			9083268	9083268-BLK1	08/24/09 14:38	
PCB-1016	Surrogate: Decachlorobiphenyl	84%			9083268	9083268-BLK1	08/24/09 14:38	
PCB-1221	9083289-BLK1							
PCB-1232	PCB-1016	< 0.200		ug/L	9083289	9083289-BLK1	08/24/09 22:35	
PCB-1242	PCB-1221	< 0.200		ug/L	9083289	9083289-BLK1	08/24/09 22:35	
PCB-1248 <0,200 ug/L 9083289 9083289-BLKI 08/24/09 22:35 PCB-1254 <0,200	PCB-1232	<0.200		ug/L	9083289	9083289-BLK1	08/24/09 22:35	
PCB-1254 <0.200 ug/L 9083289 9083289-BLK1 08/24/09 22:35 PCB-1260 <0.200 ug/L 9083289 9083289 9083289-BLK1 08/24/09 22:35 Surrogate: Tetrachloro-meta-xylene 63% 9083289 9083289 9083289-BLK1 08/24/09 22:35 Polychlorinated Biphenyls in Oil by EPA Method 8082 9083263-BLK1 08/24/09 22:35 PCB-1016 <0.0190 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1221 <0.0110 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1232 <0.0200 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1242 <0.0140 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1254 <0.0190 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1260 <0.0140 mg/kg 9083263 9083263-BLK1 08/27/09 13:34	PCB-1242	< 0.200		ug/L	9083289	9083289-BLK1	08/24/09 22:35	
PCB-1260 <0.200 ug/L 9083289 9083289-BLK1 08/24/09 22:35 Surrogate: Tetrachloro-meta-xylene 63% 9083289 9083289 9083289-BLK1 08/24/09 22:35 Polychlorinated Biphenyls in Oil by EPA Method 8082 POlychlorinated Biphenyls in Oil by EPA Method 8082 9083263-BLK1 PCB-1016 <0.0190 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1221 <0.0110 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1232 <0.0200 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1242 <0.0140 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1254 <0.0190 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1260 <0.0140 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 Surrogate: Tetrachloro-meta-xylene 90% 9083263 9083263-BLK1 08/27/09 13:34	PCB-1248	< 0.200		ug/L	9083289	9083289-BLK1	08/24/09 22:35 ·	
Surrogate: Tetrachloro-meta-xylene 63% 9083289 9083289 9083289-BLK1 08/24/09 22:35 Polychlorinated Biphenyls in Oil by EPA Method 8082 9083263-BLK1 PCB-1016 <0.0190 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1221 <0.0110 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1232 <0.0200 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1242 <0.0140 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1254 <0.0110 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1260 <0.0140 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 Surrogate: Tetrachloro-meta-xylene 90% 9083263 9083263-BLK1 08/27/09 13:34	PCB-1254	< 0.200		ug/L	9083289	9083289-BLK1	08/24/09 22:35	-
Surrogate: Decachlorobiphenyl 77% 9083289 9083289-BLK1 08/24/09 22:35	PCB-1260	< 0.200		ug/L	9083289	9083289-BLK1	08/24/09 22:35	
Polychlorinated Biphenyls in Oil by EPA Method 8082 9083263-BLK1 PCB-1016 CO.0190 PCB-1221 PCB-1232 PCB-1232 PCB-1242 PCB-1242 PCB-1248 PCB-1254 PCB-1254 PCB-1254 PCB-1260 Surrogate: Tetrachloro-meta-xylene POWS 200 by EPA Method 8082 9083263 9083263 9083263 9083263 9083263-BLK1 908/27/09 13:34 9083263 9083263-BLK1 908/27/09 13:34	Surrogate: Tetrachloro-meta-xylene	63%			9083289	9083289-BLK1	08/24/09 22:35	
9083263-BLK1 PCB-1016 <0.0190 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1221 <0.0110	Surrogate: Decachlorobiphenyl	77%			9083289	9083289-BLK1	08/24/09 22:35	
9083263-BLK1 PCB-1016 <0.0190 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1221 <0.0110	Polychlorinated Biphenyls in Oil	by EPA Method 8082				•		
PCB-1016 <0.0190 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1221 <0.0110	9083263-BLK1							
PCB-1232 <0.0200 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1242 <0.0140		< 0.0190		mg/kg	9083263	9083263-BLK1	08/27/09 13:34	
PCB-1242 <0.0140 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1248 <0.0110	PCB-1221	< 0.0110		mg/kg	9083263	9083263-BLK1	08/27/09 13:34	
PCB-1248 <0.0110 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1254 <0.0190	PCB-1232	< 0.0200		mg/kg	9083263	9083263-BLK1	08/27/09 13;34	
PCB-1254 <0.0190 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 PCB-1260 <0.0140	PCB-1242	< 0.0140		mg/kg	9083263	9083263-BLK1	08/27/09 13:34	
PCB-1260 <0.0140 mg/kg 9083263 9083263-BLK1 08/27/09 13:34 Surrogate: Tetrachloro-meta-xylene 90% 9083263 9083263-BLK1 08/27/09 13:34	PCB-1248	< 0.0110		mg/kg	9083263	9083263-BLK1	08/27/09 13:34	
Surrogate: Tetrachloro-meta-xylene 90% 9083263 9083263-BLK1 08/27/09 13:34	PCB-1254	< 0.0190		mg/kg	9083263	9083263-BLK1	08/27/09 13:34	
	PCB-1260	< 0.0140		mg/kg	9083263	9083263-BLK1	08/27/09 13:34	
Surrogate: Decachlorobiphenyl 88% 9083263 9083263-BLK1 08/27/09 13:34	Surrogate: Tetrachloro-meta-xylene	90%			9083263	9083263-BLK1	08/27/09 13:34	
	Surrogate: Decachlorobiphenyl	88%			9083263	9083263-BLK1	08/27/09 13:34	



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Client Mabbett & Associates, Inc. (10615)

5 Alfred Circle

Attn

Bedford, MA 01730

Christopher Mabbett

Work Order:

NSH1683

Project Name:

Bodycote 1998002.266

Project Number:

1998002.266

Received:

08/19/09 08:10

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	Analyzed % Rec. Date/Time
General Chemistry Parameters									
9090355-DUP1 % Dry Solids	50,6	45.4		%	11.	20	9090355	NSH1683-01	09/03/09 10:53



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5 Alfred Circle Bedford, MA 01730

Christopher Mabbett

Attn

Work Order:

NSH1683

Project Name:

Bodycote 1998002,266

Project Number:

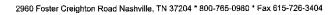
1998002.266

Received: 08/19/09 08:10

PROJECT QUALITY CONTROL DATA

LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polychlorinated Biphenyls by EPA	Method 8082							
9083268-BS1								
PCB-1260	0.167	0.154		mg/kg wet	92%	56 - 150	9083268	08/24/09 15:00
Surrogate: Tetrachloro-meta-xylene	0.0167	0.0130			78%	19 - 147	9083268	08/24/09 15:00
Surrogate: Decachlorobiphenyl	0.0167	0.0147			88%	20 - 150	9083268	08/24/09 15:00
9083289-BS1								
PCB-1260	10.0	7.54	MNR1	ug/L	75%	36 - 138	9083289	08/24/09 22:57
Surrogate: Tetrachloro-meta-xylene	1.00	0.624			62%	17 - 142	9083289	08/24/09 22:57
Surrogate: Decachlorobiphenyl	- 1.00	0.732			73%	10 - 149	9083289	08/24/09 22:57
Polychlorinated Biphenyls in Oil by	EPA Method 8082							
9083263-BS1								
PCB-1260	5,00	5.02		mg/kg	100%	56 - 150	9083263	08/27/09 13:54
Surrogate: Tetrachloro-meta-xylene	0,500	0.490			98%	19 - 147	9083263	08/27/09 13:54
Surrogate: Decachlorobiphenyl	0.500	0.500			100%	20 - 150	9083263	08/27/09 13:54





Client Mabbett & Associates, Inc. (10615)

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Bedford, MA 01730

Christopher Mabbett

Work Order:

NSH1683

Project Name:

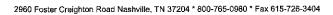
Bodycote 1998002.266

Project Number: Received: 1998002,266 08/19/09 08:10

PROJECT QUALITY CONTROL DATA

LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units		% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polychlorinated Biphenyls by EP.	A Method 8082	ı										
9083268-BSD1												
PCB-1260		0.154		mg/kg wet	0.167	92%	56 - 150	0	36	9083268		08/24/09 15:21
Surrogate: Tetrachloro-meta-xylene		0.0117		mg/kg wet	0.0167	70%	19 - 147			9083268		08/24/09 15:21
Surrogate: Decachlorobiphenyl		0.0143		mg/kg wet	0.0167	86%	20 - 150			9083268		08/24/09 15:21
9083289-BSD1												
PCB-1260		7.15		ug/L	10.0	71%	36 - 138	5	50	9083289		08/24/09 23:19
Surrogate: Tetrachloro-meta-xylene		0.592		ug/L	1.00	59%	17 - 142			9083289		08/24/09 23:19
Surrogate: Decachlorobiphenyl		0.700		ug/L	1.00	70%	10 - 149			9083289		08/24/09 23:19





Client Mabbett & Associates, Inc. (10615)

5 Alfred Circle

Attn

Bedford, MA 01730

Christopher Mabbett

Work Order:

N\$H1683

Project Name:

Bodycote 1998002.266

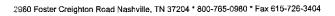
Project Number:

1998002.266

Received: 08/19/09 08:10

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q Units		Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzod Date/Time
Polychlorinated Biphenyls by EPA 9083268-MS1	A Method 8082									
PCB-1016	ND	ND		mg/kg dry		•	20 - 175	9083268	NSH1742-02	08/24/09 15:43
PCB-1221	ND	ND		mg/kg dry			17 - 175	9083268	NSH1742-02	08/24/09 15:43
PCB-1232	ND	ND		mg/kg dry			17 - 175	9083268	NSH1742-02	08/24/09 15:43
PCB-1242	ND	ND		mg/kg dry			21 - 175	9083268	NSH1742-02	08/24/09 15:43
PCB-1248	ND	ND		mg/kg dry			17 - 151	9083268	NSH1742-02	08/24/09 15;43
PCB-1254	ND	ND		mg/kg dry			32 - 160	9083268	NSH1742-02	08/24/09 15:43
PCB-1260	ND	0.148		mg/kg dry	0.179	83%ı	51 - 159	9083268	NSH1742-02	08/24/09 15:43
Surrogate: Tetrachloro-meta-xylene		0.0143		mg/kg dry	0.0179	80%	19 - 147	9083268	NSH1742-02	08/24/09 15:43
Surrogate: Decachlorobiphenyl		0.0143		mg/kg dry	0.0179	80%	20 - 150	9083268	NSH1742-02	08/24/09 15:43





Mabbett & Associates, Inc. (10615) Client

5 Alfred Circle

Attn

Bedford, MA 01730 Christopher Mabbett

Work Order:

NSH1683

Project Name:

Bodycote 1998002.266

Project Number:

1998002.266

08/19/09 08:10 Received:

PROJECT QUALITY CONTROL DATA

Matrix Spike Dup

Analyte	Orig. Val.	Orig. Val. Duplicate Q Un		Spike Conc	% Rec.	Target Range	RPD Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polychlorinated Biphenyls by EP.	A Method 808	2								
9083268-MSD1										
PCB-1016	ND	ND	mg/kg dry			20 - 175	50	9083268	NSH1742-02	08/24/09 16:05
PCB-1221	ND	ND	mg/kg dry			17 - 175	50	9083268	NSH1742-02	08/24/09 16:05
PCB-1232	ND	ND	mg/kg dry			17 - 175	50	9083268	NSH1742-02	08/24/09 16:05
PCB-1242	ND	ND	mg/kg dry			21 - 175	35	9083268	NSH1742-02	08/24/09 16:05
PCB-1248	ND	ND	mg/kg dry			17 - 151	50	9083268	NSH1742-02	08/24/09 16:05
PCB-1254	ND	ND	mg/kg dry			32 - 160	37	9083268	NSH1742-02	08/24/09 16:05
PCB-1260	ND	0.153	mg/kg dry	0.182	84%	51159	3 36	9083268	NSH1742-02	08/24/09 16:05
Surrogate: Tetrachloro-meta-xylene		0.0131	mg/kg dry	0.0182	72%	19 - 147		9083268	NSH1742-02	08/24/09 16:05
Surrogate: Decachlorobiphenyl		0.0157	mg/kg dry	0.0182	86%	20 - 150		9083268	NSH1742-02	08/24/09 16:05



THE LEADER IN ENVIRONMENTAL TESTING

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Client Mabbett & Associates, Inc. (10615)

5 Alfred Circle

Bedford, MA 01730

Christopher Mabbett

Work Order:

NSH1683

Project Name: B

Bodycote 1998002,266

Project Number:

1998002.266

Received: 08/19/09 08:10

CERTIFICATION SUMMARY

TestAmerica Nashville

Attn

Method	Matrix	AIHA	Nelac	Illinois	
SW846 8082	Oil	N/A	X	X	
SW846 8082	Soil	N/A	X	X	
SW846 8082	Water	N/A	X	X	
SW-846	Soil				



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5 Alfred Circle Bedford, MA 01730

Christopher Mabbett

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NSH1683

Project Name:

Bodycote 1998002.266

Project Number:

1998002.266

Received:

08/19/09 08:10

NELAC CERTIFICATION SUMMARY

TestAmerica Analytical - Nashville does not hold NELAC certifications for the following analytes included in this report

Method SW-846

Attn

<u>Matrix</u> Soil Analyte % Dry Solids

Page 12 of 13



THE LEADER IN ENVIRONMENTAL TESTING

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Client Mabbett & Associates, Inc. (10615)

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Attn

Bedford, MA 01730

Christopher Mabbett

Work Order:

NSH1683

Project Name:

Bodycote 1998002.266

Project Number:

1998002.266

Received:

08/19/09 08:10

DATA QUALIFIERS AND DEFINITIONS

MNR1 There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.

RL1 Reporting limit raised due to sample matrix effects.

ZX Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



Nashville, TN

COOLER RECE



NSH1683

Cooler Received/Opened On 8/19/2009 @ 0810	Si (1003
1. Tracking #(last 4 digits, FedEx)	
Courier: FedEx IR Gun ID 97460373	
2. Temperature of rep. sample or temp blank when opened:	,
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NON
4. Were custody seals on outside of cooler?	ENONA
If yes, how many and where: 2 Fro	n+)
5. Were the seals intact, signed, and dated correctly?	Æ9NONA
6. Were custody papers inside cooler?	€9NONA
certify that I opened the cooler and answered questions 1-6 (intial)	
7. Were custody seals on containers: YES (No and Intact	YESNO. (NA
Were these signed and dated correctly?	YESNO(NA)
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper	Other None
9. Cooling process: Lice lice-pack lice (direct contact) Dry ice	Other None
10. Did all containers arrive in good condition (unbroken)?	YESNONA
11. Were all container labels complete (#, date, signed, pres., etc)?	ESNONA
12. Did all container labels and tags agree with custody papers?	(ES., NONA
13a. Were VOA vials received?	YES. NO., NA
b. Was there any observable headspace present in any VOA vial?	YESNO. (NA)
14. Was there a Trip Blank in this cooler? YES(O.)NA If multiple coolers, sequence	e #
l certify that I unloaded the cooler and answered questions 7-14 (intial)	
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO.NA
b. Did the bottle labels indicate that the correct preservatives were used	ESNONA
16. Was residual chlorine present?	YES. (NO.) (A) 2 8119/00
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	
17. Were custody papers properly filled out (ink, signed, etc)?	VESNONA
18. Did you sign the custody papers in the appropriate place?	YESNONA
19. Were correct containers used for the analysis requested?	ESNO,NA
20. Was sufficient amount of sample sent in each container?	YESNONA
I certify that I entered this project into LIMS and answered guestions 17-20 (intial)	
certify that I attached a label with the unique LIMS number to each container (intial)	$ \leftarrow $
21. Were there Non-Conformance issues at login? YESNO Was a PIPE generated? YESN	0# 546 819.09
	54305



01

Nashville Division

2960 Foster Creighton Drive * Nashville TN 37204 Phone: (800) 765-0980 / (615) 726-0177 Fax:(615) 726-3404

THE PROPERTY OF EASTERNISHED	THE LEADER IN EARLISONMENTAL ASSISTA																							Pa	ge	of	f_/_	_			
Client: M	Client: Mabbett & Associates, Inc. (10615)								TA Account #: 1408030 PO #: 450 7																						
Address: 5 Alfred Circle										Invoice to: Mabbett & Associates, Inc. (10615)																					
City, State, Zip: Bedford MA 01730										Report to: Christopher Mabbett NSH1									683 -												
Client Invoice Contact; A	Client Invoice Contact: Attn: Accounts Payable									Project Name: Bodycote 1998002.266 09/02/09 23 5																					
Client Project Mgr; Christopher Mabbett								_	Facility ID: 1998002,266											_											
Client Telephone#: (781) 275-6050 Fax: (781) 275-5651								Sit	e Ad	dres	s: _		19	75	<u> </u>	^			27	2Y	S	+								
Sampler Name (Print) _	<u> </u>	Christopher Mabbett							City	,Sta	te,Zi	p: _	Λ	4	<u>(c</u>	ح د		Pa	<u>دلا</u>			Illino	ois								
SamplerSignature:		lut!	1	4	hick		- 10 mm 2 m		R	egul	ator	y Dis	trict	(CA	ı): _																
		`				Γ		Pr	eserv	/ativ	e _				Ma	trix		\neg				~-		A	naly	ze fo	T	-			1
Sample ID 31 OWS -1 22 OWS -2 33 OW - 17 24 OW - 17	8/18/09	Time Sampled 1530 1550 1315	# Containers Shipped しんなし	Υ Χ	Composite Z Z Z		Sodium Bisulfate	e Label	Orange	ahel) Plastin	(Yellow Label) Glass H2SO4	(Label)	Groundwater	Wastewater	Drinking Water	Sludge X	Sol	O; (specify) Other X X	8082 PCBs X	8082 PCBs in Oil	8270C SIM Polyaromatic Hydrocarb	Cyanide Discovable SMASO ON I)								RUSH TAT (Pre Schedule)
COMMENTS: All turn aroun	I d times are ca	lculated fro	om the	time (of recei	pt at	Test/	\mer	ica.				NO	TES	SPE	CIAI	L INS	TRU	CTI	ONS	_ - -	ВО	· / #	15874	4					<u> </u>	
* Pre-Arrangements must be m around time commitments; add There may be a charge assesse	nade AT LEA itional charge	ST 48 Hour es may be a	rs in Al ssessed	DVAN	NCE to	recei	ve res			RUS	H tu	rn												o 22°,		Þ					
Relinquished by:		Date:	Ti	me:	Rec	eived					·-		<u>, </u>	D	ate:		Tim	e:	R	eling	vish	ed by	1	-	wo orge ,			Date	<u></u>	Tim	e:
Shipped Via:	4110	6130				pped	Via:			_							┪)C D	elive	able	s (Pl	case	Circl	e One):			Date	Due o	f Ren	ort:
Received for TestAmerica by:	C 1118	Date:		me:	<u> </u>				n S	Samj	płe C	ontai	ners	Intac	t? Y	N	1	evel		Lev			evel 4		ite Sp					- 1	
Received for Test/America of	The	Sales									s Fre	Free of Headspace? Y N							———(If site specific, please pre-schedule w/ TestAmeric											_	